

18 SEPTEMBER

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The

CHEMIST AND DRUGGIST

For Retailer, Wholesaler and Manufacturer

SEPTEMBER 19 1953



EXTRACT. GLYCRRHIZÆ LIQUID. B.P.

CONTAINS
NO ADDED
BLOCK JUICE,
TREACLE,
GOLDEN SYRUP
or MOLASSES

Prepared by

BURGOYNE BURBIDGES
Established 1741. & COMPANY LIMITED, LONDON. E.6





With our World wide connections, we have access to the best sources of supply for a very wide range of chemical and allied products. Below we give the main headings of these lines.

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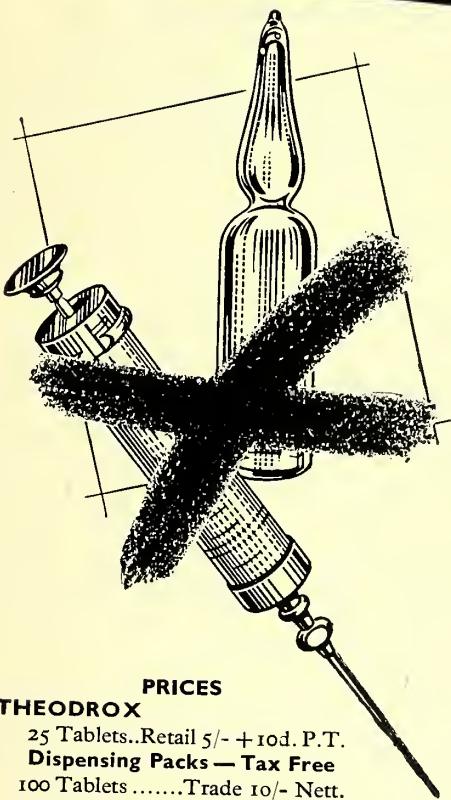
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Introducing... **THEODROX**

**PRICES****THEODROX**

25 Tablets..Retail 5/- + 1d. P.T.

Dispensing Packs — Tax Free

100 TabletsTrade 10/- Nett.

1000 " " 80/- Nett.

THEODROX with Phenobarbitone

25 Tablets..Retail 5/6 + 1d. P.T.

Dispensing Packs — Tax Free

100 TabletsTrade 10/8 Nett.

1000 " " 84/- Nett.

*Subject to normal discounts.***PLEASE ORDER THROUGH
YOUR USUAL WHOLESALER***Detailed literature on request.*** Trade Mark of***RIKER LABORATORIES LIMITED****Tel. No. 85228 29 KIRKEWHITE STREET, NOTTINGHAM Telegrams: Riker, Nottingham**

(British Patent Application No. 32742/52)

and
THEODROX
 with **PHENOBARBITONE**

***THEODROX**, OUR NEW PRESCRIPTION PRODUCT, is a new conception of aminophylline administration. It provides a dependable method of oral administration in doses large enough to produce the same high blood level obtained with parenteral administration, this being possible because gastric irritation is avoided by the inclusion of aluminium hydroxide. The introduction of this product considerably widens the scope of aminophylline therapy.

*Formulae :***THEODROX***each white tablet contains :*Aminophylline B.P. 3 gr.
Aluminium Hydroxide Gel, Dried, B.P.C. 4 gr.**THEODROX with Phenobarbitone***each yellow tablet contains :*Aminophylline B.P. 3 gr.
Aluminium Hydroxide Gel, Dried, B.P.C. 4 gr.
Phenobarbitone B.P. $\frac{1}{2}$ gr.



To Retail Chemists only

LAST 11 DAYS

Special Bonus Offer

**on all orders for Moorland ANTACID
INDIGESTION Tablets**

13



packets for the price of

12

On every dozen packets of **Moorland Antacid Indigestion Tablets** you order between September 1st and 30th, you will receive one bonus packet. **We offer you 13 packets to the dozen.** Moreover, you pay **no Purchase Tax** on the bonus—we pay that for you.

Moorland Antacid Indigestion Tablets are :
a C.F. and P.A.T.A. line ;
have always been sold to the public **only through chemists** :
are cheaper per dose than any other indigestion remedy.

Moorlands are an all-the-year-round best-seller. Over 34 million advertisements for Moorlands appear each month in Britain's newspapers. That's why it is always worth your while to stock, display and sell **Moorland Antacid Indigestion Tablets**.

RETAIL PRICES IN CARTONS

Small size 1/-

containing 4 rolls of 10 tablets (40 tablets equals 20 doses).

Large size 1/11

containing 8 rolls of 10 tablets (80 tablets equals 40 doses).

W. B. CARTWRIGHT LTD., RAWDON, LEEDS

Permanent utility!



There is always a use
for the DOIDY Cup—for

INFANTS
AND
INVALIDS

The DOIDY Cup is popular because it not only functions as the "best ever" cup for baby up to

THREE YEARS OLD but it becomes a permanent household need in times of illness. The special slant of the DOIDY solves the problem of drinking without spilling. The DOIDY is consistently advertised—good sales—good profits. In strong plastic in pastel pink, blue and cream. Also earthenware. Complete in attractive carton. Retails at 3/11.

DOIDY
A NEW SLANT ON CUPS

Obtainable from your wholesaler

A Martin Russell Ltd. product



AVOID COLDS
by taking

ESOBACTULIN
PROTECTION AGAINST COLDS

NOW—when customers require something to prevent colds, this shelf display card is the very thing to remind them of ESOBACTULIN.

DISPLAY NOW

Retail Price 7/10½d. inc. P. Tax.

33½% Discount plus Bonus 13 to the dozen.

Supplied through your usual Wholesaler.

SOUTHON LABORATORIES LTD.
84-88, UPPER RICHMOND ROAD, LONDON, S.W.15

CHEMISTS!

A NEW IDEA IN SIMPLIFIED ECONOMICAL ACCOUNT-KEEPING

Here is an all-round method of controlling all the activities of your business . . .

A chemist's life is one of the hardest . . . so many lines to stock, so many suppliers, so many bills and such small margins of profit!

A chemist needs more book-keeping, stock-taking and clerical records than most other businesses. Yet your business won't support expensive clerical labour. So what is the answer?

First, a neat compact book that will hold hundreds of records. Second, *visible* records that can be seen without searching—and referred to or entered up in a flash.

What sort of records are needed?

They vary, of course, with every business. But all chemists want stock-cum-purchase records, complete with prices, discounts, dates, order numbers, etc.—because such a record is the backbone of the chemist's business. He needs to see how stocks are,

what lines need re-ordering, what lines are selling well or hanging fire. And he ought to keep track of what money he pays out and what comes in.

The whole difficult problem has now been investigated and the right records created for chemists by chemists. There is a Shannoleaf record especially designed for chemists. It has a visible edge showing the commodity, price, place in shop, etc., and signalled as to whether stocks are high or low, on order, overdue for delivery, etc., and there are columns for dates of orders, order numbers, quantities, prices (wholesale and retail), discounts, cash discounts, carriage, margin of profit, when deliveries are made . . . and so on.

Every good chemist who wants to eliminate inefficiency should learn all about Shannoleaf records. And this is easy enough. Just jot "Shannoleaf for Chemists" on your letter-heading for full details.

Shannon Systems
FIRST IN FILING

THE SHANNON LTD

121 SHANNON CORNER

NEW MALDEN

SURREY

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VITABLEND Vitamin D₃ Oil concentrate at various potencies

CALCIFEROL B.P./U.S.P. (also in oil solution at various potencies)

CHOLESTEROL U.S.P. Recrystallized

Please send for details and quotations to **BULK SALES DEPT.**



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'RADIO-MALT'

for radiant health

The luscious toffee flavour makes Radio-Malt a favourite with the children—and parents are delighted with an established vitamin preparation, such as Radio-Malt, which the children take so readily. They know it helps to safeguard children against winter ills.

This is the time to remind your customers about Radio-Malt. A gay, coloured cut-out (12" x 19") will be available shortly. Please ask for one.

TRADE: RETAIL:

Prices: 1 lb.	-	2/5½	3/6
"	-	4/2	6/-

Quantity terms on application

THE BRITISH DRUG HOUSES LTD. LONDON N.I.

RM/T/10

3 months' *FREE* supply of Modess for your shop!

4 SEPARATE CHANCES TO WIN IN Johnson & Johnson's Modess selling competition

TAKE this great opportunity to win FREE a 3 months' supply of Modess, and boost your sales of Modess into the bargain.

Each month during the rest of this year the free 3 months' supply will be awarded to the shop whose sales of Modess exceeds the average for its type and size of outlet by the greatest percentage margin.

Your Modess counter assistant will be keen to help you win, because if you do, her prize will be a glamorous evening gown, specially made for her by a famous London fashion designer and a two days' luxury holiday in London, or if several assistants sell Modess in the winning shop, a generous cash prize will be divided between them.

As you know, Modess towels are far superior to any other because of their five special advantages. They sell easily and quickly, but to help you give sales that extra boost needed to win, we have designed two eye-taking full colour show-cards (below). The larger one is particularly attractive because it incorporates a beautifully decorated hand mirror & an actual packet of Modess. Stand them both in a really prominent position on your counter and watch sales bound up and up, putting you in the running for a prize.

Full details of the competition and the wonderful prizes in a broadsheet which has been sent to all retailers and wholesalers. Make sure that everyone in your shop sees it and make sure you have plenty of Modess in stock.

Johnson & Johnson (G.T. BRITAIN) LTD.
Personal Products Division, WREXHAM & LONDON



Be sure—be 'COX sure'

...that you sell

TABLETS

which conform to the highest standards of pharmaceutical excellence

LARGE-SCALE PRODUCTION
GROSSES OR MILLIONS
BULK OR PACKED
COATED OR UNCOATED
PRIVATE OR STANDARD FORMULAE

you can rely on

ARTHUR H. COX & CO. LTD.
Manufacturing Chemists since 1839
BRIGHTON, 7, SUSSEX.

A REALLY CONVENIENT PACK 1/6

PER SCREW LID TIN
NO MORE PRISING OFF LIDS
WITH A THREEPENNY BIT OR
FINGER NAILS!

Jelly Hand Cleaners are rapidly coming into regular use—sell the best and most attractively packed of all

EVERYONE NEEDS SWARFECA

The finest jelly hand cleanser on the market

ORDER NOW and be sure to ask for the
NEW PACK

Enquiries through usual trade
channels or direct to—

DEB CHEMICAL PROPRIETARIES LTD.
SPENCER ROAD, BELPER, DERBYS. Tel.: 278



ATTENTION ALL PHARMACISTS

A New Treatment of Angina of Effort **BENTONYL**

An ever increasing demand is being created by constant Medical propaganda. We therefore seek your co-operation in its distribution.

Obtainable through your wholesale house or direct from ourselves.

PRICE TO YOU—

Tube of 50 Pills 39/9 dozen plus P. Tax
Dispensing Pack, 250 Pills 17/6 Net

RETAILING AT—

Tube of 50 Pills - - - - - 5/3



BENGUE & CO. LTD. PATA

Manufacturing Chemists
MOUNT PLEASANT, ALPERTON, WEMBLEY, MIDDLESEX

MACLEANS announce

A NEW INDIGESTION TREATMENT WITH ALUMINIUM GLYCINATE



**A new and superior
"buffering" antacid
in tablet form**

Macleans now introduce New Macleans Tablets with Aluminium Glycinate.

Aluminium Glycinate, produced in the Macleans laboratories, is the ideal dry form of Aluminium gel. It makes possible this tableted form of the new Aluminium "buffers" which may be sucked continuously in accordance with the latest medical opinions on indigestion therapy.

Until 15th Nov.—special bonus parcels!

Special bonus parcels are available until 15th November. These give you the opportunity of stocking up on this new product on highly advantageous terms—up to 74% margin on cost!

Bonus parcel "A"	Bonus Terms Per doz.	Cash Profit Per doz.
2 doz. 1/3 roll packs	7/3	5/4 $\frac{3}{4}$
1 doz. 3/6 carton packs	20/3	15/1 $\frac{1}{2}$

TOTAL PROFIT ON PARCEL £1/5/11

Bonus parcel "B"

2 doz. 3/6 carton packs	20/3	15/1 $\frac{1}{2}$
-------------------------	------	--------------------

TOTAL PROFIT ON PARCEL £1/10/3

Bonus parcel "C"

4 doz. 1/3 roll packs	7/3	5/4 $\frac{3}{4}$
-----------------------	-----	-------------------

TOTAL PROFIT ON PARCEL £1/1/7

The "buffering" efficiency of Aluminium Glycinate is superior to that which can be obtained from an equivalent weight of any other dry form of Aluminium gel.

In addition New Macleans Tablets contain a proportion of Macleans Carbonates to ensure rapid reduction of excess acid. These fortify the action of Aluminium Glycinate to give a rapid-acting tablet without risk of alkalosis or acid rebound.

You may therefore recommend New Macleans Tablets with confidence to sufferers from acid indigestion.

To explain the action of Aluminium Glycinate to the layman, we are using the phrase "follow-through protection" in extensive press advertising.

Normal Trade Terms

	TWIST-WRAPPED	ROLL PACK
Retail Selling Prices	3/6	1/3
Price per dozen	42/-	15/-
Standard	26/6	9/5
Intermediate	25/1	8/11
Best	24/3	8/8
Display	23/7	8/5
Purchase Tax per dozen	6/7 $\frac{1}{2}$	2/4 $\frac{1}{2}$

Macleans Ltd., Manufacturing Chemists, Great West Road, Brentford, Middlesex. EALING 6616

The Birmingham Mail

TUESDAY, MAY 26, 1953

AGAIN AT APP

Remember
did not have a cold! — You took
SEROCALCIN
TABLETS



SING CITY PRICES

McKAY

Remember
you did not have a cold!
You took
SEROCALCIN
TABLETS
Be wise — immunise
yourself against
the winter colds.

SEROCALCIN

Take that Summer feeling into Winter
SEROCALCIN
TABLETS
Treatments 3/9d. and 9/10d.
Three-halfpence

Evening Standard
FRIDAY, JULY 17, 1953

other and BOY

THE OBSERVER

Sunday, June 14, 1953

Remember
the winter you
did not have a cold! — You took
SEROCALCIN
TABLETS

MANCHESTER GUARDIAN

FRIDAY JULY 17 1953

NOW IS THE TIME
to avoid those
Winter
Colds

By taking
Serocalcin tablets now you can
enjoy a winter free of colds.
Take that Summer feeling into Winter
with
SEROCALCIN
TABLETS
Treatments 3/9d. and 9/10d.

THE BRITISH TIMES

JULY 17 1953

EDITION
CLUB ANNUAL
GOLF
MOTOR CAR
CAR HIRE
AIR SERVICES
MOTOR CARS
ADVERTISING
SEROCALCIN
TREATMENTS
will defend it

THE COLD WAR
threatens your business
cold germs → absenteeism → lower production

EDINBURGH, WEDNESDAY
NATIONAL PRIVATE
SALE
RINGS
COME along our
which we have
scores of exquisitely
for the new season.
LADIES' up-to-date
at the
LADIES' EXHIBITION
DRESS SHOW, IT

The Yorkshire Post

LEEDS, WEDNESDAY, JULY 22, 1953

Millions

The Evening News
LONDON, MONDAY, JULY 20, 1953
THREE-HALFPEN

NOW IS THE TIME

to avoid those
Winter Colds



Take that Summer feeling into Winter
with
SEROCALCIN
TABLETS
Treatments 3/9d. and 9/10d.

Says 'This Affair
PLANNING
Switched Both

Remember
the winter you did
have a cold! — You took
SEROCALCIN
TABLETS

Remember
the winter you did
not have a cold!
You took
SEROCALCIN
TABLETS

Be wise — immunise with
Serocalcin tablets early this
Autumn and enjoy a winter
free of colds.

Treatments 3/9d & 9/10d

Remember
the winter you did not have a cold!
You took
SEROCALCIN
TABLETS

Be wise — immunise with
Serocalcin tablets early this
Autumn and enjoy a winter
free of colds.

will be told!

becomes a Best Seller

Serocalcin has already made a big name for itself as a preparation specially suited to fight the common cold. Now an intensive publicity campaign in the National Press is in operation again to create bigger turnover and profits to all Serocalcin stockists. The "cold" Season is starting — the public will be asking you about Serocalcin, so be sure you are fully stocked to meet demands.

PRICE TO PUBLIC NOW 3/9d. and 9/10d.

SEROCALCIN
TABLETS





Frank
MACOWAL
& YANATAS
Ltd.

MANUFACTURING CHEMISTS
ESTABLISHED 1894

Offer their services for the
manufacture to your formulae and
particular requirements, packaging
and despatch of :—

**COSMETIC, TOILET,
PHARMACEUTICAL &
HOUSEHOLD PREPARATIONS**

All enquiries treated as strictly confidential.

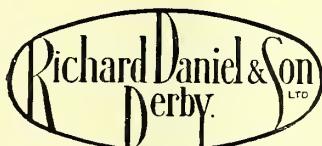
WILLSHAW STREET · LONDON · S.E.14

Phone: TIDeway 3846

PENICILLIN PREPARATIONS

LOZENGES · TABLETS · OINTMENTS · Etc.
Aids to Dispensing Outfits of Creams and Drops

MANUFACTURED BY



DISTRIBUTED BY

MOORE MEDICINAL PRODUCTS LTD

I QUEENS TERRACE
 ABERDEEN. Tel: 27233

64 GLOUCESTER PLACE
 LONDON, W.I. Tel: WELbeck 5718/9

Detailed Price List on Request.

SOL-TAN



*Speedy
 Relief
 from Pain !*
'SOL-TAN'
PROFESSIONAL

Cat. No. E.M.29

Incorporating the latest scientific developments, this attractive model is ideally constructed for heavy duty professional use. Supplied with one G.E.S. Long Wave Infra Red burner, 600 watt and one G.E.S. Mixed Wave Radiant Heat burner, 750 watt, and instructions.

List Price £10 . 10 . 0 Tax Free

Spare Burners 35/- each

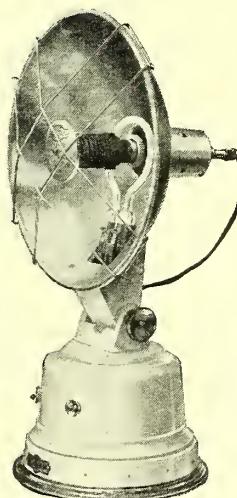
Indoor Sunshine !

'SOL-TAN'
"TRIPLERAY"
100/23 T.M.
 Quartz Burner

This excellent portable model produces rich Ultra-Violet Radiant Heat Infra Red rays at a touch of a switch. Exceptionally well made and incorporating only the highest class materials and workmanship.

Operated on A.C. 200/220 & 230/250 volt.

List Price £19.15.0 Complete.
 Tax Free



Only supplied against Doctor's certificate or for professional use

Fully illustrated Catalogue gladly sent on request. 'Sol-Tan' Marketed for Home and Export by:-

THE LONDON COMMERCIAL ELECTRICAL STORES LTD
 20-23 CURSITOR STREET, E.C.4. · CHANCERY 6488 / 9



"May your name be honoured"

This motto, embodied in the emblem of Cecil Swann Ltd.—based on the 800 year old Swann family crest, is the keynote of the Company's entire activities.

With individuality in advertising becoming more and more imperative as marketing conditions become increasingly competitive, the policy of Cecil Swann Ltd. is specifically directed to the creation of publicity which reflects the individuality of each of the Company's clients. To honour the name of a client, his product or his services, in every way possible, is the most important objective of the Cecil Swann organisation, through its untiring devotion to the demands of any publicity problem.

Cecil Swann Ltd. is composed of personalities whose years of experience cover all forms of publicity—national, trade and technical Press advertising; film, radio, outdoor and exhibition publicity; public relations work; market research in industrial and consumer commodities. The resources of the Company's creative personnel are boundless and are of the highest order—they can produce the most exacting type of prestige publicity and can evolve the most revolutionary ideas if the situation so demands.

The co-ordinated efforts of the whole Company are focused on close personal attention to every client, regardless of the size of the publicity appropriation.

We are proud of our organisation which, though young, is rapidly acquiring important new business through the experience and enterprise of its own personalities and advisory consultants.

CECIL SWANN LTD. ADVERTISING

CHAIRMAN: CECIL H. SWANN

MANAGING DIRECTOR: L. B. SINGLETON, PH.C.

16 BERKELEY STREET, LONDON, W.1

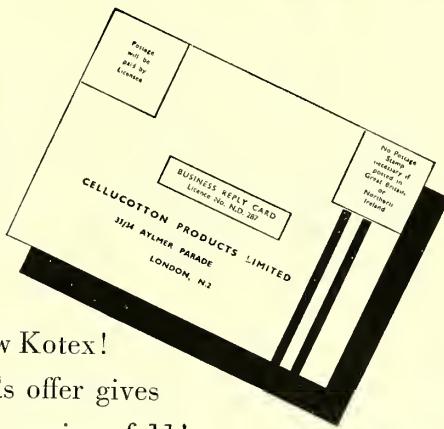
MAYFAIR 9515/8

*Only 14 days left
to cash in on the*

KOTEX FREE GOODS OFFER !

Send in your pre-paid

postcard to-day !



Yes, extra profits, sure profits when you display the new Kotex!

*Because until September 30th, our free goods offer gives
you 12 2/3d. boxes for the price of 11!*

National Advertising in women's magazines will spread this exciting news about the larger, softer Kotex with loops and rounded ends to women everywhere in Great Britain!

AND the new immaculate white box has an eye-catching green wrapper that makes it ideal for display, tears off easily so your customers won't be embarrassed by carrying an obvious sanitary towel pack.

REMEMBER ! Special Free Goods Offer Ends September 30th !



DURING FREE GOODS OFFER your price is 18/7 per doz. boxes

Normal Trade Price
per dozen boxes
20/3d.

Retail Price
per box
2/3d.

KOTEX
WITH LOOPS

DON'T DELAY ! SEND IN YOUR PRE-PAID POSTCARD TODAY !

12 BOXES FOR THE PRICE OF 11 !

CELLUCOTTON PRODUCTS LTD., CARKERS LANE, LONDON, N.W.5

Christmas SATCHEL BAGS

Order a supply now of the attractive



Certor

SATCHEL BAGS

for the Christmas trade.

Size: 5" x 7" x 9½"

The Certor Christmas Satchel Bag is made from the best bleached kraft—a fine quality bag in an appropriate seasonal design. It is printed in three colours—red, green and gold.

In parcels of 500; minimum quantity, one parcel.

Christmas WRAPPING PAPERS
in three designs—Holly design, Lady design,
Greetings design. Minimum quantity, one ream.

CREPE DISPLAY PAPERS
of the best quality. Special series for Christmas decorations: Colours—gold; silver; silver and peach stripes; silver and white stripes; holly design. Also a full range of the usual colours.

All goods carriage paid in free packages.

MACDONALD & SON LTD · HOPE MILLS · POLLARD STREET · MANCHESTER 4

A new development in the treatment of

MOUTH AND THROAT INFECTIONS

BRADOSOL ANTISEPTIC LOZENGES

Bradosol is a potent quaternary ammonium bactericide and fungicide, effective in extreme dilution against most pathogenic organisms causing **SORE THROATS**

- Well tolerated and virtually non-toxic
- Does not produce resistant strains
- Effective against fungi
- Does not contain potentially toxic local anaesthetics

*Each lozenge contains 0.5 mg. β-phenoxy-ethyl-dimethyl-dodecyl ammonium bromide
Tubes of 20 Lozenges (2/6) Subject to the usual discounts Exempt Purchase Tax*

CIBA

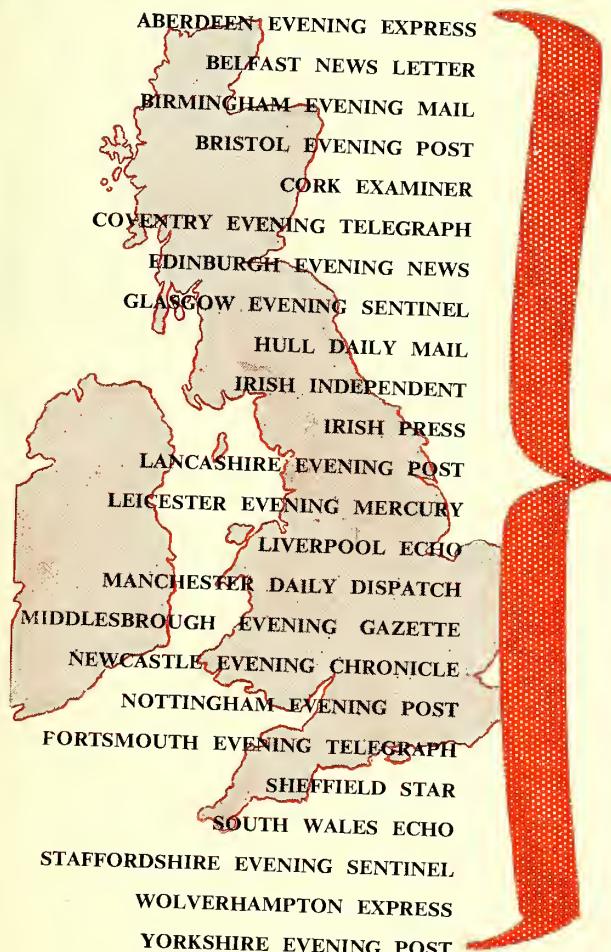
'Bradosol' is a registered trade mark Reg. user

CIBA LABORATORIES LTD · HORSHAM · SUSSEX Telephone: Horsham 1234 Telegrams: Cibalabs, Horsham

4/2

during September alone...

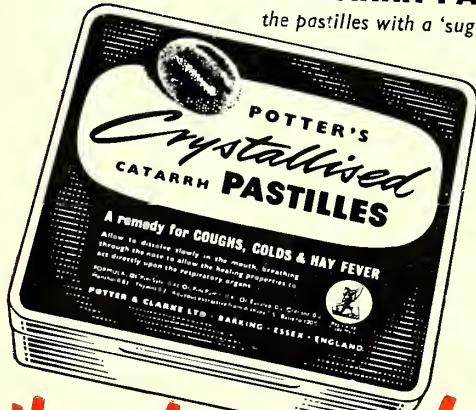
in addition to large-scale NATIONAL publicity,
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Provincial Newspapers for these two



Potter's PRODUCTS



POTTER'S CATARRH PASTILLES
the well-known mass-selling line
and its **NEW COMPANION PRODUCT**
POTTER'S Crystallised CATARRH PASTILLES



Can you meet the demand?

| ORDER NOW FROM YOUR WHOLESALER

N.B. Unless you specify "Crystallised Pastilles",
the usual Potter's Catarrh Pastilles will be supplied.

POTTER & CLARKE LTD • River Road • Barking • Essex



NEW! VITA Iron

The new FORMULA

Each tablet (6½ gr.) contains

Ferr. Sulph. Exsic.	1.00 gr.
Cupri Carbonas	0.17 mgm.
Extract of Cerevis. Ferment. Sicc. (1=7)	162.00 mgm.
Aneurin. Hydrochlor. (Vitamin B1)	0.17 mgm.
Riboflav. (Vitamin B2)	0.29 mgm.
Nicotinamid.	1.67 mgm.
Acid. Ascorb. (Vitamin C)	4.17 mgm.

The new Vitaminized Iron Jelloids combine adequate iron dosage with an exceptionally high content of the B Vitamin Complex fortified with extra Aneurine, Riboflavin, Nicotinamide, and Ascorbic Acid — thus presenting a haemopoietic and general tonic of outstanding merit

**Nation-wide Advertising
begins first week of
OCTOBER**

PRICES

(not subject to purchase tax)

Small size 1/9 (retail)	16/8 PER DOZ.
Large size 4/6 (retail)	.43/- PER DOZ.

Enquiries to: BEECHAM (NORTHERN) LTD., ST. HELENS, LA

VITAMINIZED Jelloids

COMPARATIVE TABLE

of Iron and B Vitamin content in the recommended daily dosages of Iron Jelloids and three competitive products

All quantities in milligrammes. n.s.=not stated

	IRON JELLOIDS	A	B	C
Iron	110.00	17.00	17.30	68.00
Copper	1.02	n.s.	n.s.	trace
Concentrated Yeast (B Complex)	972.00	n.s.	n.s.	n.s.
Vitamin B1	1.02	1.00	1.06	0.6
Vitamin B2	1.74	1.00	1.00	n.s.
Nicotinamide	10.02	10.00	10.00	n.s.



TO SECURE BEST TERMS

order with other proprietaries supplied by Beecham (Northern) Ltd., in a combined parcel assorted to meet your requirements

Distributors in the United Kingdom

Max Factor announce

FOR THE SECOND HALF OF '53



NINE POWERFUL CAMPAIGNS

WHICH CANNOT FAIL TO SWEEP

your MAX FACTOR SALES TO A NEW HIGH!

MAX FACTOR

No. 1

Creme Puff

You have already seen just the *beginning* of the advertising which will make this the greatest Max Factor introduction ever.

MAX FACTOR

No. 4

Pan-Stik

The tremendous fillip of a separate campaign, covering 40 insertions in Britain's most widely read newspapers and magazines.

MAX FACTOR

No. 7

Satin Flow

Launched on a new record-breaking run with a 34-insertion campaign in papers covering the principal population areas.

MAX FACTOR

No. 2

Lipstick

Leading National and Women's Journals, used in an exciting new campaign which will bring you record Max Factor Lipstick turnover.

MAX FACTOR

No. 5

Face Powder

The most concentrated, most intensive campaign ever for Britain's biggest selling powder . . . with new high-impact advertisements.

MAX FACTOR

No. 8

Talc

The most-est advertising for the most-est Talc! . . . building your Talcum Powder Sales to a new peak.

MAX FACTOR

No. 3

Pan-Cake

A new forceful presentation featured in no less than 35 large-space insertions in Sunday Newspapers, Magazines and leading Provincial Newspapers.

MAX FACTOR

No. 6

Invisible

MAKE-UP FOUNDATION

Another powerful advertising push covering over 20 insertions in media read by *your* customers.

MAX FACTOR

No. 9

Gift Sets

And again—special advertising for Britain's most popular gift of loveliness—the season's most exciting packs.

TIE UP WITH MAX FACTOR DISPLAYS—USE THE FREE STEREOS FOR YOUR OWN LOCAL ADVERTISING AND MAKE THIS BIGGEST-EVER ADVERTISING CAMPAIGN WORK FOR YOU

LES USINES CHIMIQUES DES LABORATOIRES FRANCAIS



CAN SUPPLY

SYNTHETIC DRUGS
VITAMINS
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AMINO-ACIDS
PIGMENTS
AND ENZYMES

GLYCOSIDES
AND ALKALOIDS

BIOLOGICAL
PRODUCTS

PARIS

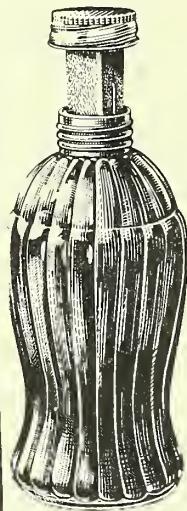
PLEASE ADDRESS INITIAL ENQUIRIES TO :

ROUSSEL LABORATORIES LTD.

847, HARROW ROAD LONDON N.W.10

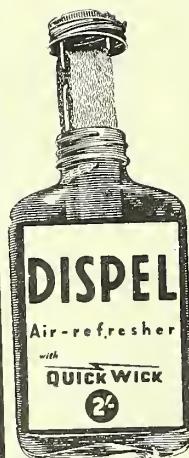
TELEPHONE : LADBROKE 3608 (3 LINES)

There's more profit in DISPEL the best* deodoriser



Wick-Vase 2/9
9d. profit

(and 12 charged as 10
until Dec. 31st). You
make more profit on the
Wick-Vase than on any
other wick deodoriser.



Refill 1/9

25% profit
Refill purchases make
wick deodorisers regular
repeat business.



Popular 2/-

25% profit
Still the most
popular wick
deodoriser.

display DISPEL it pays

- Best because DISPEL
- works to the last drop.
- Amazing new "wetting
- agent" makes wick
- s-t-a-y wet. DISPEL
- works all the time—not
- just first few hours.

Advance Industries Ltd., 87 Regent Street, London, W.1

NEW DESIGN CHRISTMAS WRAPPING PAPER CARRIER BAGS

Samples & prices on application to :-

COLOROLL LTD.

72 TOTTENHAM COURT ROAD,
LONDON, W.I.

MUSEUM 0655



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enquiries and orders for

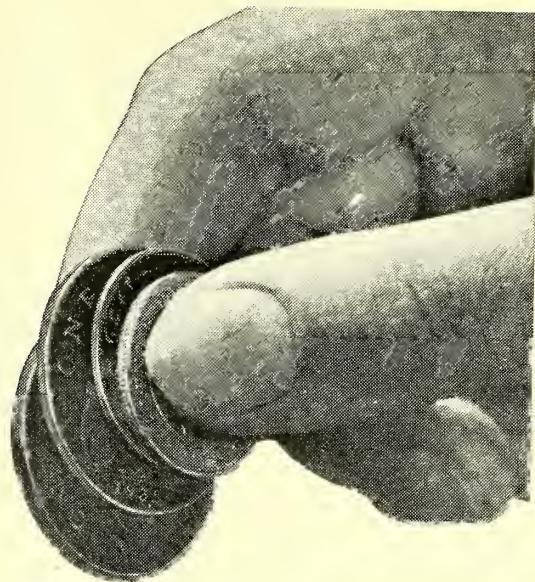
Drugs, Galenicals,
B.P., B.P.C., N.F. Preparations, Tablets,
Pills, Ointments, Capsules,
Chemists' and Druggists' Sundries,
Surgical Dressings, Plasters,
Appliances, Ethicals, Patents and
Toilet Preparations at competitive prices

A Comprehensive Service for the Pharmacist
BIOREX
LABORATORIES LTD.
WHOLESALE AND MANUFACTURING CHEMISTS
47-51 EXMOUTH STREET, LONDON, E.C.1
Telephone: TERMINUS 9494-1431

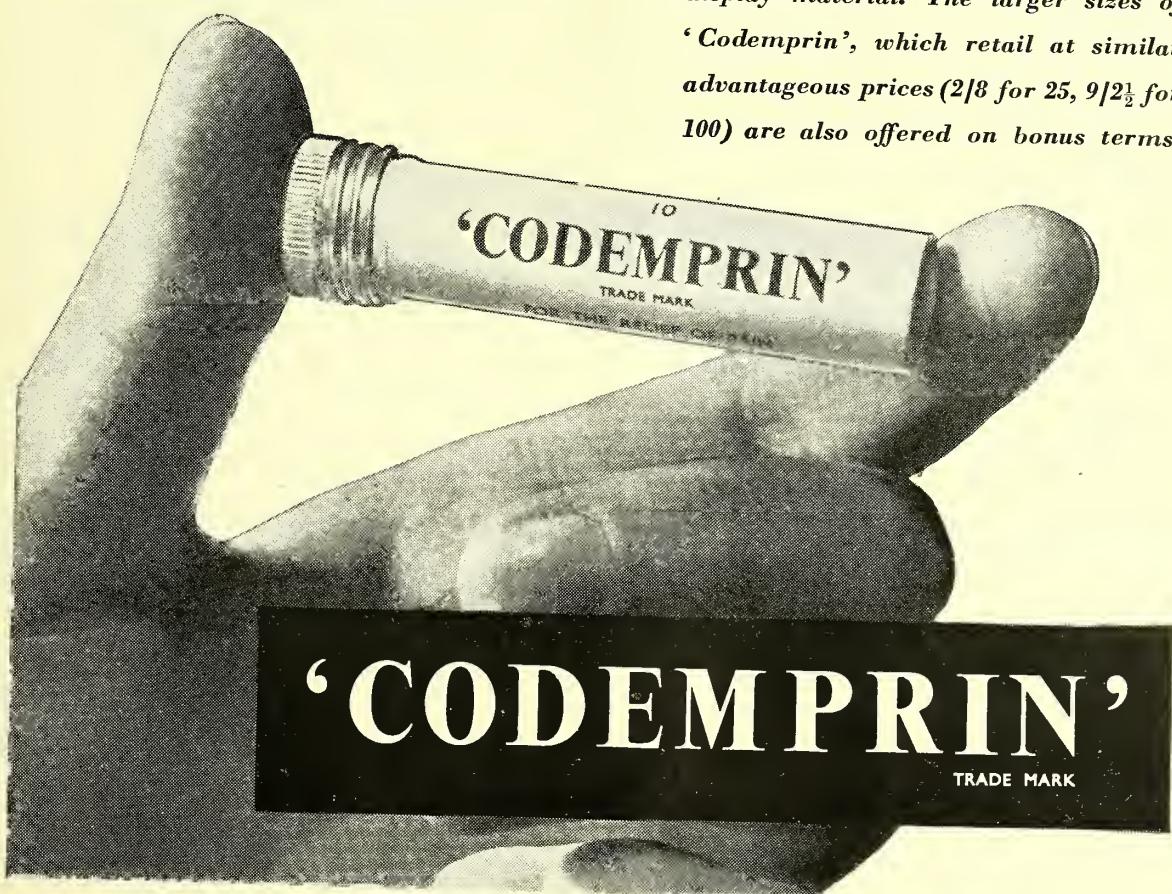
Daily delivery service in
the Greater London Area

Price and pack to fit pocket and purse

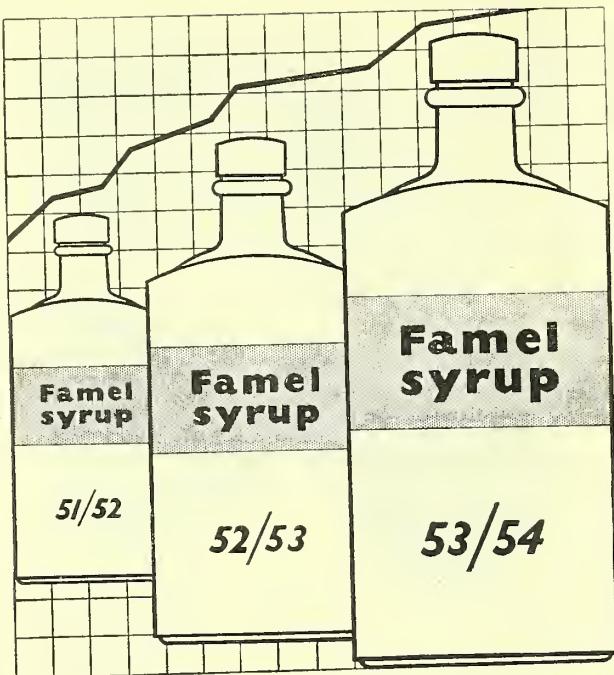
Discriminating customers who require a strong reliable analgesic will have no second thoughts when shown the tube pack of 'Codemprin'. The low price (1/2 $\frac{1}{2}$ including P.T.), the four ingredients—acetylsalicylic acid, phenacetin, caffeine and codeine—and the fact that it is a B. W. & Co. product, together make it particularly attractive



With each order for 2 doz. tubes you get both a bonus of 2 and attractive display material. The larger sizes of 'Codemprin', which retail at similar advantageous prices (2/8 for 25, 9/2 $\frac{1}{2}$ for 100) are also offered on bonus terms.



BURROUGHS WELLCOME & CO. (*The Wellcome Foundation Ltd.*) LONDON



FAMEL SALES

will break all records

THIS WINTER

FAMEL COUGH SYRUP
and
FAMEL THROAT PASTILLES

THE sales and reputation of Famel Syrup have been going up all over the world for more than 50 years — last winter saw a new high record! There can be only one reason for this — an ever-growing mass of people have so benefited by their first trial of this remarkable cough preparation that they make it their permanent stand-by for coughs and colds, year after year.

BIGGER ADVERTISING FOR FAMEL!

This year we are planning another great advance to persuade still another great section of the public to make its first trial of Famel Syrup. A feature of this winter's campaign will be the number of 'big-space' advertisements (in addition to the usual sizes). Famel advertisements will appear in the giant-circulation newspapers and magazines and their impact will be felt in every home in the country.

It's your opportunity The persuasive power of the new Famel advertising, plus the effect of the growing volume of personal recommendations of delighted users, will bring a heavier demand for Famel Syrup this winter than you have ever experienced before. You'll need very good stocks to meet it —

SO ORDER NOW FOR A RECORD SEASON

WATCH YOUR PROFITS

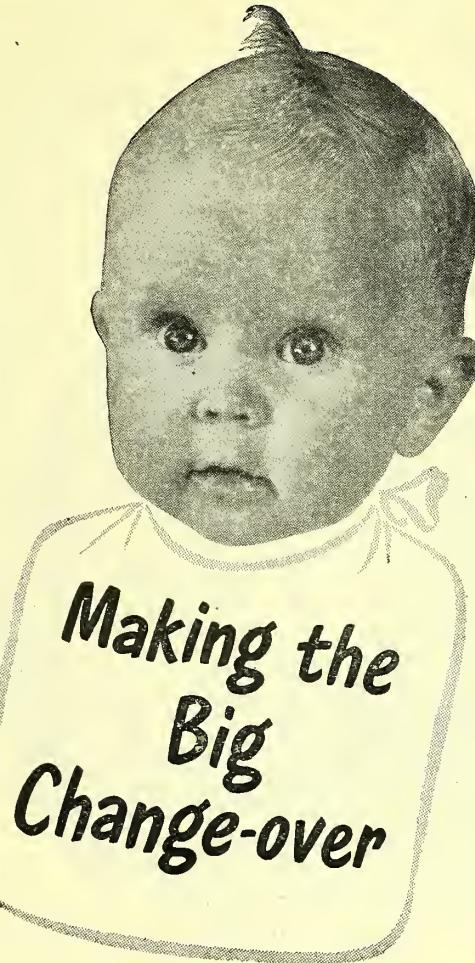
When ordering, see that you qualify for generous quantity discounts. You can make up with any other Keldon lines.

Three sizes: 2/4½, 3/7, 7/1½

Famel Pastilles: 1/9½

KELDON LTD • PERIVALE • MIDDLESEX





At five to six months of age babies make the change-over to mixed feeding—and more and more of them are going on to Bovril Brand Weaning Food.

You, too, can make a big change-over. Stock this quick-selling new product. Tell mothers about it. Explain how excellent it is. When travelling and on holiday a packet can be carried in a purse. A meal for Baby made in a single minute.

**BOVRIL WEANING FOOD
is a winner because it is :**

*recommended by doctors and clinics
made in cube form
nourishing and easy to prepare
ideal when travelling and on holiday
very economical
vigorously advertised*

**BOVRIL BRAND TRITURATED
BEEF AND VEGETABLE**

Weaning Food

Retail price 6^d. 4 cube packet

For full particulars of trade terms please write to :—

BOVRIL LIMITED, OLD STREET, LONDON, E.C.I



THE CHEMIST AND DRUGGIST

ESTABLISHED 1859

The weekly newspaper for pharmacy and all sections of the drug, pharmaceutical and fine chemical, cosmetic, and allied industries

*Official organ of the Pharmaceutical Society of Ireland
and the Pharmaceutical Society of Northern Ireland*

Volume 160 September 19, 1953 No. 3839

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EDITORIAL AND PUBLISHING OFFICES

28 ESSEX STREET, STRAND, LONDON, W.C.2

Telephone: Central 6565

Telegrams: Chemicus, Strand, London

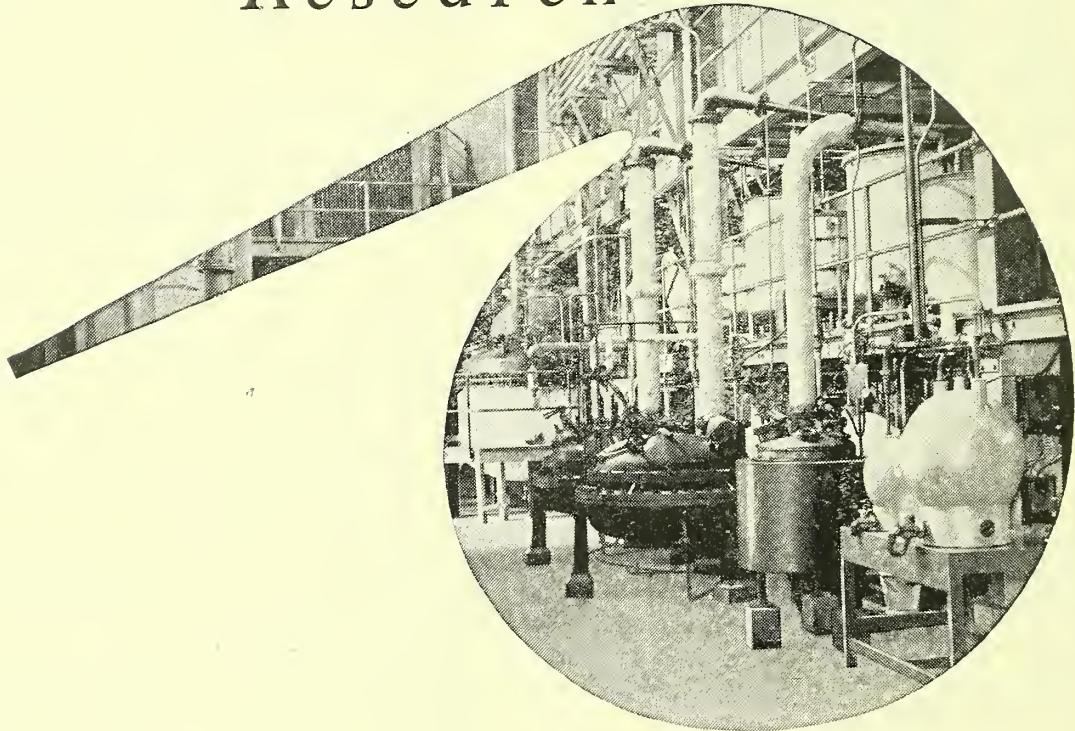
Branch Offices:

BIRMINGHAM, 2: 111 New Street. Phone: Midland 2921	MANCHESTER: 344 Washway Road, SALE. Phone: Sale 4595
GLASGOW: 24 Dixon Road, S.2. Phone: Pollock 4802	LEEDS, 6: 32 Wynford Rise, West Park. Phone: Leeds 78438

ANNUAL SUBSCRIPTION, which includes The Chemist and Druggist Diary and Year Book, £2. Single copies one shilling each.

ROCHE

Research



FOR every Roche preparation which is made available to the medical profession, there are many hundreds which have been tested and eliminated in our laboratories.

Doctors can be certain that, when they prescribe Roche preparations, they are specifying the products of original Roche research.

Our Medical Information Department maintains a comprehensive abstracting service for the benefit of the medical profession. Literature on all Roche preparations will be sent on request.

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ROCHE PRODUCTS LIMITED, Welwyn Garden City

The



CHEMIST AND DRUGGIST

Volume 160

SEPTEMBER 19, 1953

No. 3839

Progress with Common Cold

VIRUS GROWN IN TISSUE CULTURES

THE Ministry of Health has announced that after "seven years of patience and perseverance," workers at the Common Cold Research Unit, Harvard Hospital, Salisbury, have succeeded in growing the common cold virus in tissue cultures of human embryonic lung.

The information was contained in a paper prepared by Dr. C. H. Andrews and colleagues and given to the sixth International Congress of Microbiology in Rome at a time that coincided with the Ministry's announcement. The workers have been able to produce a series of colds from material cultivated in tissue cultures of human embryonic lungs. Serial cultures up to the tenth have produced colds. However, only about 10 per cent. of people inoculated with the cultures developed colds, against between 27 and 57 per cent. (in different years) when filtrates of cold secretions were used. It is thought that the smaller numbers of colds produced by the new cultures may be accounted for by the virulence of the virus being lowered during the cultivation.

In a preliminary communication to the *Lancet*, 1953, 265, 546-47, Dr. Andrews and colleagues give details of their method. Cultures of human lung tissue were prepared from embryos up to sixteen weeks of age, obtained with the collaboration of surgeons who had to terminate pregnancies prematurely. The cultures were incubated in tubes attached to a slowly revolving drum. All of the cultures used for passages were at least three days old, by which time a good area of outgrowth was present. By the tenth serial culture the original virus had survived thirty-five days at 37° C. and had undergone 10⁵-fold dilution. Culture materials were further diluted 1:5 before testing. As a cold had never been produced with an infected nasal washing diluted more than 1:10³ there was good evidence that the infective agent had multiplied in the culture. It was not possible to differentiate clinically between the colds produced from the culture materials and those from nasal washings.

MARKING CONTAINERS

Manufacturers' suggestions

THE Association of British Chemical Manufacturers has issued a booklet "Marking Containers" that outlines a system of warning labels for hazardous chemicals. It is intended to warn handlers and users that some products need special care. It applies only to

Britain and primarily to chemicals passing in quantities exceeding 6 pints for liquids and 8 lb. for solids, up to and including the time the container is opened for use in the premises of the recipient. Specimen wording is given for labels for a first list of over 200 chemicals; wording for products not yet included can be worked out from the general principles and standard phrases described in detail. The information given on the labels includes the name—which for the list of 200 chemicals is that laid down in draft British Standard—"Recommended Names for Chemicals Used in Industry"; warning word—for example "Warning," "Caution," "Danger," "Poison," etc.; nature of hazard—for example, "corrosive—causes burns"; precautions required and accident or first-aid action. The scheme has been approved by the council of the Association and recommended for adoption by all members. The Chief Inspector of Factories has welcomed the scheme and recommends it for adoption as a code of practice by all chemical manufacturers. Copies of the 90-p. booklet can be obtained from the Association at 166 Piccadilly, London, W.1, price 7s. 6d.

STATUTORY COMMITTEE

Three inquiries

THE Statutory Committee of the Pharmaceutical Society is meeting at 17 Bloomsbury Square, London, W.C.1, on September 29, at 2.30 p.m. to:—
 1. Resume an inquiry adjourned from July 2, 1952, into information relating to the conduct of a pharmacist whilst in charge of a pharmacy.
 2. Consider information and evidence from which it appears that a member of the Society has been convicted of offences under the Dangerous Drugs Act. On September 30, at 10.30 a.m., the Committee meets to inquire into a complaint that a member of the Society who is the registered superintendent and a director of a company carrying on business as an authorised seller of poisons may have been guilty of misconduct in respect of a business association of the company with a group of medical practitioners.

PURCHASE TAX

Delivery charges to be ignored

THE following modification in tax assessment, which gives effect to a recommendation of the Grant Committee on Purchase Tax Valuation, will come into operation on October 1. The tax is chargeable under the law on the wholesale value of the goods inclusive of the cost of delivery, and in general this basis continues unchanged. But where an extra charge for delivery over and above the normal free-delivered price is made on small orders or for special delivery, such extra charge may be ignored in computing the tax wholesale value.

This relaxation is subject to the following conditions:—

(i) it applies only to goods which are normally costed and sold at a free-delivered price, and it covers additional charges such as are imposed for dispatching goods in quantities below the free delivery limit or because express or other expedited delivery is required. It does not apply to goods which are normally sold on carriage forward terms or in cases where the supplier usually makes a separate charge for delivery but sends an occasional large order carriage free;

(ii) it includes any charge made for extra packing directly associated with the small or special delivery. But no waiver of tax can be allowed, for example, in respect of the cost of fancy boxes instead of ordinary packing;

(iii) the relaxation is normally limited to cases where the additional delivery charge does not exceed 10s. 0d., but any claim that it should be applied to additional charges in excess of this limit should be addressed to the local Officer of Customs and Excise.

The above details are given in Customs and Excise Notice 79B.

The Commissioners of Customs and Excise give notice that medical certificates obtained on or after October 1 for *severe splanchnotropis* will no longer be accepted as entitling a registered trader to deliver belts free of purchase tax. Page 5 of Notice 78D (February, 1953 edition) should be noted accordingly.



Finishing touches being put recently to a sign that identifies the shop of Mr. O. D. Timothy, Rhuddlan, Flints, as a pharmacy.

CHEMISTS FEDERATION

Meeting of the council

A MEETING of the Chemists Federation council was held on September 9, the president (Mr. S. M. Lennox) in the chair. Meetings of the C.F. propaganda committee and C.F. standards committee were held on the previous day. The council approved the following additions to schedules of C.F. agreements:—*Burroughs Wellcome & Co.*, Actidil; *Moore Medicinal Products, Ltd.*, In-go Analgesic Balm; *Sharp & Dohme, Ltd.*, Elixir adetate, Altepose, Liquor Diastos, Topaminic; *Thornton & Ross, Ltd.*, Pennine eye drops; *Westminster Laboratories, Ltd.*, Kipak Inhaler. A report was received of the propaganda work undertaken by the representative of the Federation in the following National Pharmaceutical Union branch areas:—Merionethshire, Cardiganshire, Pembrokeshire, Carmarthenshire and Shropshire and Montgomeryshire. It was reported that meetings in connection with the C.F. national display fortnight had been arranged to be held by a number of N.P.U. branches during September. Approval was given for the C.F. display-fortnight show-material to be dispatched to all chemists, free of charge, by September 25. A pre-paid reply post card would also be sent under separate cover to all chemists and the council expressed the hope that all retailer members would co-operate by returning those cards in order that the council would be able to judge the result of the special effort. The council approved a draft of "The Chemists Friend," a new C.F. publication which will be sent periodically to all members of the Federation. The first edition will be circulated shortly.

N.H.S. IN 1952

Costs continue to rise

THE report of the Ministry of Health for the year ended December 31, 1952 (H.M. Stationery Office, 5s.) shows that during that year 216,773,000 prescriptions were dispensed by chemist contractors. In the previous year the total was 227,693,920, but that number was inflated by the influenza epidemic in January 1951. The total for 1952 was affected by the charges introduced from June 1, and the sickness attributable to severe fog in the London area in December. The total cost of prescriptions dispensed by chemist contractors during the year ended December 31, 1951, was £41,662,354, as compared with £22,816,798 for the first six months of the year under review. Sampling shows that the average cost per prescription continued to rise, though not as steeply as in 1951. The report shows by a graph that the cost as estimated by sampling rose to its highest (about 51·7d.) at the end of July, dropped a little during October and rose to the same figure in December. The main reason for the increase appears to be the rising cost of ingredients and the prescribing of expensive new drugs. The cost of supplying dressings on prescription fell by about 16 per cent. during the year. There is no evidence that the treatment of patients suffered by the reduction in the number of prescriptions dispensed during the year.

On the production side the Minister reports that during the year the supply of raw materials greatly improved. The improvement coincided with some slackening of the export demand for finished products so that as the year advanced the manufacturers were able to meet all orders at short notice. That was noted particularly with penicillin, where the raw material position had been difficult and manufacturers "keep up continuous research to get ever-increasing yields from the same quantity of raw material." Notable results had been obtained from that work and a fermenter tank could now deliver ten to twenty times as much penicillin as in 1944 from the same quantity of material. The theoretical limit had by no means been reached. Licence agreements had been signed for the manufacture in Great Britain for home use and for export of many American products which many countries preferred to obtain from Britain because of the currencies shortage.

PRODUCTION CENSUS

Preliminary arrangements

THE Board of Trade stated on September 9 that it has been decided by the Census of Production Advisory Committee that all establishments within the field of production will be included in the Census of Production for 1954 which will be taken in 1955. The 1954 census will be on similar lines to the full census for 1951. The statutory form of return will include questions broadly the same as in 1951 on working proprietors; number of employees; capital expenditure on plant, machinery and vehicles; capital expenditure on new building work; work given out; stocks at the beginning and end of the year; and transport payments. On wages and salaries producers will be asked to give information about employers' payments to superannuation and other pension funds, etc., as well as their contributions to all National Insurance schemes. It will help to complete the information available on labour costs. Producers will also be asked to state, as in the 1948 census, the total cost of materials and fuel purchased with details, by quantity and value, of the principal items purchased. Information will be sought about certain materials which are common to virtually all trades, e.g., replacement parts and packing materials. On output, producers will be asked to show the total value of sales and work done, with details of sales of each of a number of products, on the lines of the detailed form used for 1951. In the light of the information obtained from the censuses for 1948 and 1951, some modifications of the headings in the materials and fuel section and in the output section will be made in the forms used for certain trades. No information will be required about merchant goods. Details of the output and materials headings which are to be specified for 1954 will be sent for comments to the trade associations concerned as soon as possible. Any firm in the field of production requiring further particulars about the census for 1954 should write to the Census of Production Office, Neville House,

Page Street, London, S.W.1, stating the nature of the business carried on.

NATIONAL INSURANCE

Local Committees' Functions

THE National Insurance Advisory Committee has been asked to consider and report upon preliminary draft regulations, the National Insurance (Local Advisory Committees) Amendment Regulations, 1953 (H.M. Stationery Office, price 2d.), intended to widen the scope of local advisory committees to cover questions concerned with the administration of the Industrial Injuries scheme. Representations from interested parties should be sent to the secretary of the Committee, 10 John Adam Street, London, W.C.2, so as to be received on or before September 28.

LOCAL NEWS

Ealing Refresher Course

THE West Middlesex Chemists' Association is arranging a refresher course to be held at the Ealing Technical College commencing early in October on alternate Tuesdays. The subjects to be dealt with are "Recent Advances in Therapeutics" and "Forensic Pharmacy." Pharmacists and students (not necessarily of the Association) who are interested should apply to Mr. R. C. Edwards, 265A Fulham Road, Chelsea, London, S.W.3, as early as possible.

Longer Rota Period Wanted

HALIFAX Trades Council have written to Halifax Executive Council recently stating that the 6 to 7 p.m. rota of Halifax chemists is considered insufficient. The Executive Council will consider the representations at their October meeting.

IRISH NEWS

Jury Service Exemption

THE Juries Act which becomes law in Northern Ireland on September 1 gives exemption from jury service to "Any duly registered pharmaceutical chemist who is either the sole proprietor of, or is employed as a pharmaceutical chemist in a shop which is kept open for retailing poisons and dispensing and compounding medicines and in which no other duly qualified person is so employed."

Council Nominations

NOMINATIONS will close on September 21 in the annual election to fill four vacancies on the council of the Pharmaceutical Society of Northern Ireland. The retiring members of the council are Messrs. S. E. Campbell, Londonderry; H. J. Cousley, Magherafelt; H. P. Crossin, Belfast, and H. F. Moore, Belfast. In the event of a contest the result of the election will be declared at the annual meeting of the Society on October 5. Mr. Moore is a past-president of the Society, and Mr. Crossin is the present treasurer.

Isoniazid and Antibiotics

THE Northern Ireland Minister of Agriculture has made an order under

the Therapeutic Substances (Prevention of Misuse) Act, 1953, requiring that no penicillin supplement or aureomycin supplement shall be sold or supplied in Northern Ireland for mixing with pig food or poultry food otherwise than in a container bearing a label containing certain prescribed particulars. Other orders made by the Minister bring aureomycin or preparations containing it, when intended for parenteral injection, under the control of the Therapeutic Substances Act, 1925, as substances the purity or potency of which cannot be adequately tested by chemical means; and isoniazid within the scope of the Penicillin Act controlling sale and supply (see *C. & D.*, August 15, p. 153).

NEWS IN BRIEF

Need for Chemical Engineers.—Addressing a meeting of the Institute of Chemical Engineers in London recently, Sir Harold Hartley, F.R.S., said that Britain needed to improve its position in the rapidly growing field of chemical engineering. More schools of chemical engineering in universities and technical colleges and more financial support for research in the subject were required.

College Courses.—Among evening courses available at the Sir John Cass College, Jewry Street, Aldgate, London, E.C.3, in the 1953-54 session are the following:

Industrial Law. The course will consist of twelve lectures (by Mr. T. A. Blanco White) which will be given on Thursday evenings at 6 p.m., beginning on October 1. Fee is 25s. A course of lectures on patents will be held during the second term and a course on trade marks during the third term.

Radiochemistry and Radioactivity. A course of eight lectures (by Dr. A. G. Maddock) will be held on Tuesday evenings at 6 p.m., beginning on October 6. Fee for the course of lectures is £1. A course on the applications of radioactivity in biology will be arranged for the second term.

Spectrochemical Analysis. The course (by Mr. A. S. Nickelson), which will be based upon techniques of emission spectroscopy, consists of twelve lectures and will be held on Friday evenings from 6 to 7 p.m., beginning on October 2. Fee for the course of lectures is 25s. A course of ten lectures on Absorption Spectroscopy will be held in the second term.

Statistical Methods in Scientific and Industrial Research. The course (by Mr. A. J. Feuell) will consist of twenty-four lectures on Monday evenings at 6.45 p.m., during the first and second terms, beginning on October 5. The course will be suitable for chemists, biologists and others interested in the practical application of statistics to problems of research and manufacture. Fee for the course is £2 10s. Detailed prospectuses and enrolment forms for the courses are available from the principal.

SPORT

Golf.—EDINBURGH CHEMISTS' GOLF CLUB, outing over Longniddry recently, Thornton and Ross prize: G. W. Allan (14), 74. Best scratch score: J. B. McCaig 84. No. 1 section (tie): A. H. Gillies (9) and R. H. Gilliland (10), 77. No. 2 section: W. Hourston (20), 79. No. 3 section: J. A. Smith (22), 77.

Bowls.—SCOTTISH CHEMISTS single-handed bowling championship final at Burnhead Green, Larbert, Stirlings, recently, won by A. Patrick, Bainsford, Falkirk, Stirlings, who beat W. Dickson, Edinburgh, by 21 shots to 5.

THE CHEMIST AND DRUGGIST

TOPICAL REFLECTIONS

By Xrayser

Outstandingly Successful

The words that head this paragraph, taken from an editorial article on p. 263, truly describe this year's meeting of the British Pharmaceutical Conference. As one who was able to observe a little of the work of organisation in London, I can testify that it was heavy from the beginning. The tributes paid at the Closing Session to the Local Committee and to the officers and staff of the Pharmaceutical Society were fully deserved. In variety of programme, number of overseas visitors and, indeed, in every respect, the event has set a standard not easily to be surpassed. Your accomplishment in bringing out, amid the pressure of editing a weekly issue, a series of "Daily Bulletins," is on record as an example of enterprise in the best traditions of British journalism. You have occasionally experimented on these lines at past Conferences; I remember especially the dispatch of pictures by air to Belfast in 1935; but never before, I think, have you sent out this kind of pictorial hors d'œuvre on so extensive a scale. The "Conference Personalities" section is, as always, a helpful feature. We all like to know who's who on these occasions. Portraits, where included, are particularly useful in associating each person with the content of the paper written by him. Of the same value in that connection are the excellent cartoons on pp. 266-67.

Well-balance Programme

Evidently the balance of the various elements in the Conference programme was carefully adjusted. In the Science Section the papers covered a good range of subject. It has been a relief to find that some of the most familiar drugs are not yet relegated to the dustbin, but are still providing matter for research. New facts emerging in discussions on the monographs may not have been numerous, but were often of great interest; for example, Dr. J. M. Rowson and colleagues of his have found that digitalis leaf in moderately fine powder can be extracted completely by maceration in 70 per cent. alcohol in an hour. The exhibition arranged by the History of Pharmacy Committee of the Pharmaceutical Society attracted considerable attention and praise. The work of selection and arrangement fell, I understand, to the lot of a subcommittee of this body; we are much indebted to these energetic workers. The dated pill tile is a very lucky acquisition, in view of the rarity of such specimens. As you note, a substantial proportion of the exhibits came from the Society's museum, which is becoming as notable a collection on the historical side as on the scientific.

Science for Ordinary People

At a recent sectional session of the British Association at Liverpool, Mr. Ritchie Calder stated, as reported, that in presenting science to the public most scientists are illiterate, inarticulate, and irresponsible. This assertion, with its jingling il-, in- and ir-, calls for comment. The speaker was good enough to expound his three adjectives. By "illiterate" he meant that scientists are "the hostages of their own professional slang," and therefore incapable of communicating ideas; by "inarticulate," that they cannot or do not bother to express themselves intelligibly; by "irresponsible" that they do not consider and explain the influence of their work on ordinary people's lives. Scientists of the il-, in- and ir- class approach ordinary people by one or more of three channels—university extension lectures, books or the Press, and broadcasting. The professional slang derided by the speaker is a kind of shorthand saving a good deal of time: I am not aware that the general public is being dosed with it. Inarticulateness may be regarded as a by-product of illiteracy not meriting separate classification. And to slate scientists for neglecting to explain to all and sundry how science affects, or may affect, normal lives—if, in fact, such negligence is common—is to misconceive the place of the scientist in national life. If he speaks or writes about this matter, he speaks or writes on the platform of citizenship.

CONFERENCE PERSONALITIES

MR. H. P. LEVIUS, Ph.C., M.Sc. (Colorado), Johannesburg, co-author of a paper on emulsion stability, has been until recently a teaching assistant at the University of Colorado, U.S.A.



He qualified as a pharmacist in 1950 after study at Johannesburg. A year later he became a pharmaceutical chemist (from Chelsea Polytechnic, London). He worked for a period with May & Baker, Ltd., Dagenham, where he was concerned with the manufacture and investigation of pharmaceutical preparations. He obtained his degree at Colorado recently.

MISS N. BAXTER, one of the collaborators with Dr. Wokes in a paper on vitamin B₁₂ injections has been six years in the Ovaltine Research Laboratories, working with Mr. Daglish mainly on spectrophotometry and chromatography. She was formerly employed by Roche Products, Ltd., where she worked with Mr. Adamson. Miss Baxter lives at Hemel Hempstead. Her colleague Miss JANET HORSFORD has also been at the Ovaltine Laboratories for about six years. Formerly she assisted Dr. Chloe Klatzkin. More recently she has been directly assisting Dr. Wokes.

MR. F. G. DROMMOND, Ph.D., M.Sc., B.Sc., Ph.C., co-author of a paper on emulsion stability is professor of pharmacy at the University of Colorado. He studied pharmacy at the

university gaining his Ph.C. and B.Sc. in pharmacy with special honours. A year later he obtained his M.Sc. degree. After serving as an officer in the United States armed forces during the 1939-45 war he returned to the university as an instructor in pharmacy. He obtained his degree of Ph.D. at Purdue University, Indiana, after which he returned to the University of Colorado as professor of pharmacy.

MR. A. T. SISSONS (Dean of the College of the Pharmaceutical Society of Victoria, Melbourne, Australia) was visiting Great Britain for the first time since he left it in 1919 after holding a war-time research appointment with the Department of Explosives supply, to return to his native Australia. The following year he was appointed to his present post, and under his guardianship the college has increased its student capacity from 120 to 550, and the length of course has been increased from eighteen months to four years. During the years 1920-28 Mr. Sissons combined the deanship with being, at the University of Melbourne, independent lecturer in chemistry to dental students, and was, during those years a member of the faculty of dentistry. Subsequently for many years he was pharmacist representative on the University's faculty of medicine. He took an early interest in education and before coming to Great Britain during the first world war held a post with the school of education, Melbourne University, where he specialised in the teaching of science, particularly of chemistry. Mr. Sissons is an examiner in pharmaceutical chemistry of the Victoria Pharmacy Board examiners. He estimates that during his stay in Great Britain he has seen "upwards of twenty" of the twenty to thirty old students of his that are now in Britain.

NEW COMPANIES

P.C. = Private Company;

R.O. = Registered Office

J. GWYNNE JONES, LTD. (P.C.)—Capital £100. To carry on the business of chemists, etc. Director: John Jones, M.P.S. R.O.: 95 Holton Road, Barry, Glam.

WARRINERS (CHEMISTS), LTD. (P.C.)—Capital £2,000. To carry on the business of chemists, druggists and librarians, etc. Directors: Mervyn M. Warriner and Olga A. Blackburn. R.O.: 2 Grange Avenue, Harrogate.

WILLIAMS & WALKER, LTD. (P.C.)—Capital £5,000. To carry on the business of chemists and general dealers, etc. Subscribers: Hugh K. Steele and James Chapman, Solicitors; Maughan & Hall, Lloyds Bank Chambers, Collingwood Street, Newcastle-on-Tyne, 1.

M. COPELAND, LTD. (P.C.)—Capital £100. To acquire the business of a pharmacist formerly carried on by Maurice Copeland, M.P.S., at 5 Bury New Road, Manchester, and at 119A Withington Road, Manchester. Directors: Maurice Copeland and Shirley Copeland. R.O.: 55 Market Street, Manchester, 1.

BIRTH

SMART.—At 21 Kingsway, Nuneaton, Warwickshire, on September 9, to Aileen, wife of Archibald Stanley Smart, Ph.C., a son.

DEATHS

BURROUGH.—At his home at Epsom, Surrey, on September 14, Mr. Ernest Janies Burrough (a director of James Burrough, Ltd., distillers, London, S.E.11), aged eighty-two. Mr. Burrough was the second son of Mr. James Burrough who was the founder of the firm from which the company originated. At an early age he entered his father's business in Chelsea where the firm was established. When the limited company was formed in 1898, Mr. Burrough was one of the original directors. He eventually assumed the duties of secretary, a position which he held until failing health during the past two years forced him to accept semi-retirement but did not diminish a keen interest in the company's affairs which he had maintained throughout his life. Mr. Burrough made the business his life's work and although not actively engaged outside in the activities of the company he was well known in the trade. He is survived by his widow, three sons and three daughters. Two of the sons, Messrs. Alan and Norman, are present directors of the company.

FENWICK.—On August 26, Mr. Thomas Knox Fenwick, M.P.S., 33 Canning Street, Hebburn-on-Tyne, Co. Durham, aged fifty-six.

TOMLINSON.—On June 25, Mr. Luther Tomlinson, M.P.S., 61 Woodlands Avenue, Thornton-Cleveleys, Lancashire, aged seventy-three.

WHALLEY.—On August 13, Mr. Frank Whalley, M.P.S., 238 Market Street, Hyde, Cheshire. Mr. Whalley qualified in 1918.

BUSINESS CHANGES

JACKEL ET CIE (OF PARIS), LTD., have removed to 11 Devon Street, Glasgow, C.5. Telephone: South 3150.

S. FIGGIS & CO., LTD., produce brokers, 47 Fenchurch Street, London, E.C.3, removed their sale-rooms and offices to Dunster House, Mincing Lane, London, E.C.3, on September 12. The telephone numbers and telegraphic address are unchanged.

Appointments

W. J. BUSH & CO., LTD., Ash Grove, Hackney, London, E.8, have appointed Messrs. L. C. Rennie and C. F. Fisher their representatives for the chemical and perfumery trade, respectively, in the North and South London areas.

EVANS MEDICAL SUPPLIES, LTD., Speke, Liverpool, 19, have appointed Mr. A. W. D. Cummins their medical representative in Bristol, Gloucestershire, Dorset, Somerset, Wiltshire, Hampshire, Berkshire and Oxfordshire; Mr. R. W. Adams, their medical representative for West and North-West London, and Middlesex, Hertfordshire and Bedfordshire; Mr. F. Pegler their chemists' representative attached to Evans Medical Supplies (Northern), Ltd.

Company News

Previous year's figures in parentheses

SANGERS, LTD.—Consolidated trading profit for year ended February 28 was £473,924 (£502,137) increased by other income to £482,777 (£507,981). After depreciation, £25,194 (£24,816); directors' remuneration, £57,972 (£57,740); bank interest, £1,087 (£1,324); note interest, £15,000 (same), etc., the profit was £379,776 (£405,252). To tax, £215,812 (£253,393). Ordinary dividend, 27½ per cent. (same).

SCIENTISTS IN SESSION AT LIVERPOOL

Variety of Subjects Discussed by British Association

THE 1953 meeting of the British Association for the Advancement of Science was held in Liverpool from September 2 to 9, with Sir Edward Appleton (president) in the chair. The meeting was divided into thirteen sections which included chemistry, physiology and education. The Lord Mayor of Liverpool (Alderman W. J. Tristram, M.P.S.) welcoming the Association to Liverpool, said it was thirty years since the last British Association meeting had been held in the city.

PROFESSOR G. R. CLEMO, F.R.S., in an address to the chemistry section of which he was president dealt with the nature of city smoke. He pointed out that as the problem of cancer was still unsolved every effort at prevention should be made. Figures published by the Registrar General showed a continuing steady rise in the death rate from cancer of the lung. That focused attention on the air, or rather smoke, breathed.

In the same section a symposium on chemotherapy was held. DR. B. A. HEMS read a paper entitled "The Chemistry of Antibiotics." After dealing with the chemistry of penicillin he pointed out that the discovery of streptomycin resulted from a deliberate search that was started before the benefits of penicillin were known. Also dealt with were streptomycin derivatives, chloramphenicol, terramycin and aureomycin. The constitution of each was known fully. None except chloramphenicol showed even a remote resemblance to anything that fitted present ideas of the mechanism of drug action by interference with essential known metabolites. Up to the present, synthetic work to imitate the action of the antibiotics had not brought forward anything useful as their structures appeared to be "remarkably specific." Each had served to "shake" research in the chemistry of drugs out of what was becoming a "pit dug by the extremely successful discoveries in sulphonamides, antimalarials and trypanocides."

In a subsequent discussion DR. HEMS suggested that the problem of drug resistance was a "strictly biological problem," and that he did not know the answer. Dr. W. B. Whalley admitted that the science of chemotherapy and antibiotics was still in its infancy but it was a "lusty infant."

Problem of Chemotherapy

PROFESSOR B. G. MAEGRAITH in a paper given to the same section said that scientific chemotherapy based on real knowledge of drug action had not yet been attained partly because the complex, host-parasite-drug, had not yet been fully studied. Insufficient attention had been paid to the interaction of parasite and host. At the Liverpool School of Tropical Medicine it had recently been shown that the changing health of a host affected a parasite living within the host. Malaria in rats and monkeys (and probably in

man) could be suppressed by a milk diet. The disease could be "restarted" by adding acid to the milk. There was hope that that new method, and others like it, would lead to a more logical approach to chemotherapy.

A paper on "Chemotherapy" by DR. F. L. ROSE described how nature produced such substances as antibiotics perhaps as defence weapons after "long periods of trial and error" while the synthetic chemist proceeded along more logical lines. He could utilise chemical structures unknown to Nature and achieve the same therapeutic effect with simpler molecules as that achieved by Nature.

In section I (physiology) DR. W. H. H. ANDREWS read a paper on "Physiological Approach to Research Projects in Malaria" on September 9. He said that it was not known how malarial parasites damaged tissue cells, but once damage occurred various changes resulted—all of which tended

to reduce the blood supply to the tissues.

A paper in the education section dealt with training for management. Sir Charles Renold, its author, suggested that the introduction into, and training of graduates for, industry could not be left to chance; there should be a well thought out scheme. The real problem which has to be overcome was the "lopsidedness" of the graduate's equipment for life and a sense of frustration which might arise while he found himself separated from a "real job" by his lack of practical experience. Any scheme should have three objectives: to re-orientate the graduate from the ways of the academic into the life of industry; give him a general understanding of a company's business—technological, commercial and organisational; and fit him to place his foot on a managerial ladder. Such a scheme was best run jointly by companies and universities.

VETERINARY CONGRESS

Papers on Antibiotics and Modern Drugs

THE British Veterinary Association held its seventy-first annual Congress in Aberdeen, September 6-12. Among the matter presented by various workers were the following:—

A review of modern drugs in veterinary practice was presented by MESSRS. S. F. SCHEYDY and C. E. E. BUNN (medical division, Sharpe & Dohme, Division of Merck & Co., Philadelphia, U.S.A.). Dealing with sulphonamides the paper made particular reference to sulphisoxazole (3,4-dimethyl-5-sulphanilamidoisoxazole) which was of value as it was unusually soluble in the urine thus reducing the possibility of crystalluria. Mixtures of antibiotics were useful as a means of increasing the spectrum of antibacterial activity. An ointment containing penicillin and streptomycin was useful against bovine mastitis where both gram-positive and gram-negative organisms were involved. Mixtures of tyrothricin and bacitracin have been found useful clinically for the treatment of superficial wounds. When used in veterinary practice certain enzymes have been found to assist the penetration of antibiotics. They also cause debridement of suppurative processes and rapid lysis of purulent or fibrinous exudates and blood clots in neurotic and suppurative wounds thus facilitating removal of the debris and helping to hasten the process of healing. Enzymes mentioned include streptodornase, streptokinase and trypsin.

A paper, "Antibiotics as Supplements to the Ration of Farm Livestock," by MESSRS. W. S. GORDON and J. H. TAYLOR, Agricultural Research Council field station, Compton, Berks, described a study, on 143 pigs, of antibiotic (aureomycin and penicillin) supplemented diet. The results were: an increase in growth rate ranging from

10 to 15 per cent. and a reduction in food consumption ranging from 5 to 8 per cent. when vegetable diet was used. When animal diet was used the average increase in growth rate was 12 per cent. and reduction in food consumption 9-11 per cent. Differences between the effects of the two antibiotics were not apparent.

Work of Ministry Laboratory

DR. A. W. STABLEFORTH (director, Ministry of Agriculture Veterinary Laboratory, Weybridge) described recent advances made at his laboratory. It has been shown that the same tuberculin when tested in animals sensitised in different ways gives different results. The laboratory had undertaken to supply material for a proposed standard for avian tuberculin to be established by the Committee on Biological Standards of the World Health Organisation. During the past year work had been done on the adaptation of the swine fever virus to rabbits and goats with the object of producing a vaccine more durable in its effects than crystal violet vaccine and which may also be more economical. Experiments on a vaccine made from the organism causing Newcastle disease in poultry were carried out, administration being by nasal instillation. Results showed that although the vaccine conferred a durable immunity the vaccine strain would spread to other birds and interfere with the diagnostic test for the disease and would, in other ways, mask the spread of virulent infection. When used against coccidiosis sulphquinuoxaline was found, in certain circumstances, to cause considerable mortality associated with extensive haemorrhages and necrotic lesions. The evidence available suggests that the cause is not too high a dosage.

PHARMACEUTICAL SOCIETY OF IRELAND

A MEETING of the Council of the Pharmaceutical Society of Ireland was held in Dublin on September 8, Mr. M. Costello (vice-president) in the chair. There were present Messrs. H. P. Corrigan (treasurer), T. B. O'Sullivan, A. A. Toher, P. Brooke-Kelly, T. C. Scott, P. Fullam, P. F. McGrath, M. Power, C. D. O'Shea, G. C. O'Neill, and J. Gleeson. Mr. J. G. Coleman, (registrar) was in attendance. Apologies for inability to attend were received from the president (Mr. J. P. Kissane), Messrs. C. J. Cremin, P. A. Brady, T.D., and J. A. O'Rourke.

Compounding at Mental Hospitals

Arising out of the minutes of the July meeting, MR. C. D. O'SHEA said that in the discussion on compounding and dispensing at mental hospital institutions (see *C. & D.*, July 25, p. 81) he had mentioned that it was unsatisfactory that one doctor on the staff of the Cork Mental Hospital should do the dispensing for the other eight medical officers. He had since been speaking to the doctor concerned who assured him that he had nothing whatever to do with the dispensing of medicines in the hospital. The medical officer had further informed him that he had spoken on several occasions to the county manager on the desirability of having a qualified dispenser appointed, and the county manager had now informed him that he was prepared to have such an appointment made experimentally on a part-time or temporary basis. MR. GLEESON said all that arose out of a discussion on the position in Portrane Mental Hospital where they had over 2,000 patients with no qualified dispenser. THE VICE-PRESIDENT suggested that they should take up the matter with the Cork County Manager and have an appointment made to the hospital before taking up, with the Minister of Health, the question of compounding in mental hospitals generally. The Council unanimously agreed.

The Council had before it correspondence which originated between Messrs. T. P. Whelehan Son & Co., distributors in the Republic of the products of Lederle Laboratories Division (Cyanamid Products, Ltd.), and the Department of Agriculture regarding the importation and distribution of antibiotic preparations. In a letter dated July 15 the department wrote to Messrs. Whelehan stating that pending the outcome of experiments licences for the import of antibiotic preparations would be granted only to veterinary surgeons for professional purposes. The granting of licences would henceforth be made "only to veterinary surgeons who apply direct to the department on their own notepaper stating clearly the amount required" and further that the "quantities ordered by veterinary surgeons must be supplied direct by the importing agent to the veterinary surgeons concerned." Messrs. Whelehan replied that such a decision would "cut right across" the distribution structure that they were agents for, which was based for maximum effectiveness on the medical, veterinary and pharmaceutical statutory professions. Messrs. Whelehan then intimated that as they felt that the Department's arrangement might be repugnant to the Society the matter was being referred to them and the outcome of their representations was being awaited.

THE REGISTRAR reported that following the receipt of the correspondence from Messrs. Whelehan he wrote to the secretary of the Department of Agriculture on July 25 stating that as the conditions laid down by the Department would appear to affect the status of Licentiates of the Society and to restrain them from the discharge of a normal professional function, he requested that the Department would defer operation of that limiting clause until the Council had had an opportunity of considering it fully. A reply dated August 6 stated that pending the result of experiments the Minister was not prepared to authorise the importation of Aurofac and similar preparations for gen-

eral use in the feeding of animals, and gave the provisions for veterinary surgeons mentioned above. The letter continued that despite those arrangements, cases had occurred of such preparations being on sale and, in order to ensure more effective control over the use of antibiotic preparations, the Minister found it necessary to introduce those arrangements. In the circumstances the Minister did not consider it advisable to postpone their introduction. The arrangements were provisional, designed to meet exceptional circumstances and would be reviewed as soon as the Minister was in a position to take a final decision. No conditions as to distribution were imposed in the case of the wide variety of other veterinary preparations subject to import licence under the Agriculture Produce (Cereals) Acts, 1933-39. The Minister trusted that that information would enable the Council to accept the provisional and exceptional arrangements which it had been found advisable to introduce.

THE REGISTRAR explained that since the Council were not meeting in August he got into communication with the president, and the letter to the Department was sent after consultation and with the President's approval. MR. TOHER said a Bill had been introduced in Britain to modify the Therapeutic Substances Act there and made it possible for all the manufacturers to make such preparations, the use of which had been proved beneficial. MR. SCOTT said the Department of Agriculture in Britain apparently believed that the antibiotics were of benefit to animals but the Irish Department wanted to be satisfied by experiment. THE VICE-PRESIDENT said they could appreciate the Department's desire to carry out experiments first to see if those preparations fulfilled the claims made for them. MR. M. POWER told the Council of his experience with regard to Aurofac in the Limerick area. MR. TOHER said it was rather a pity that the distribution of the antibiotics to Irish farmers should be held up since it had been proved that they were beneficial to animals. He could appreciate restrictions being imposed if the preparations were habit forming or dangerous drugs. Several members of Council mentioned that supplies of Aurofac were available for sale in different parts of the country, and it was decided in view of that information, to write to the Department intimating that the Council regarded the present restrictions as unsatisfactory.

Attendance at Health Council

A letter from the secretary of the Minister for Health said that the Minister had asked him to refer to the attendance at recent meetings of the National Health Council of a substitute for one of the members of the Council nominated by the Society and to state that, in view of the statutory nature of the appointment of Council members, the Minister was advised that substitution for members unable to attend meetings was undesirable for legal reasons. In the circumstances the Society would appreciate that only its appointed nominees could, in future, attend meetings of the [National Health] Council. The letter was noted.

Dr. Brian Crealey and Dr. Nora McGarry, both of whom submitted L.A.H. certificates, were granted registration as Pharmaceutical Chemists. Preliminary registrations were notified in respect of Aileen Cora Deirdre Banim, Sheila Ann Cosgrove, Owen Gerard Deneny, Bridget Bernadette Fallon, Carmel Teresa Kissane, Nora Mary Bernadette O'Sullivan, Claire Marguerite Ryan, Bridget Bernadette Collins, Margaret M. Duggan, Ursula Jane McGoldrick and Julia Walsh.

Messrs. T. C. Scott and Mr. T. B. O'Sullivan were appointed scrutineers of the ballot in the event of a contested election to the seven rotational vacancies on the Council during October. The reports of the House, Schools and

Law Committees were submitted and approved. Professor J. J. McHenry was appointed examiner in physics to the Pre-Registration examination.

THE REGISTRAR mentioned that up to date twenty-two entries had been received for the forthcoming Pre-Registration examination and from inquiries received the number might be anything from thirty to thirty-five. The deaths of Peter Ronaghan, M.P.S.I., Michael Kelly, L.P.S.I., and Patrick Michael Joyce, R.D., were reported.

MR. O'SHEA and other members of Council said they had been asked to draw attention to the fact that some Dispensing Chemists and Druggists were using the words "Dispensing Chemist" only on their shop fronts. That was a misleading description of their qualification. It was agreed that the Registrar should issue a notification on the matter to all Dispensing Chemists and Druggists setting out the position.

The Licence Certificates of the following were signed and sealed: Eamonn N. Kinirons, John K. McGarry, John Scannell, John K. Young, Misses Penelope F. Caffrey, Catherine Coyne, Mary Hanly, Sarah K. Keane, and Mary O. McNamara.

NORTHERN IRELAND HEALTH BOARD

Doctor-Chemist Case Shelved for Three Months

THE Northern Ireland General Health Services Board, on the recommendation of the Drug Pricing Committee, decided at its meeting on August 26 to review at the end of three months the case of a doctor alleged to have passed prescriptions direct to a chemist who was his brother (see *C. & D.*, July 18, p. 53).

In a further letter to the Committee the doctor had maintained that he had no arrangement with that chemist, or any other chemist, for the dispensing of his prescriptions. THE BOARD'S PHARMACIST (Mr. A. W. Kernahan) reported that of the prescriptions sent to the Board in July by the chemist for payment, almost 40 per cent. had been written either by the doctor or his locum.

National Formulary Charges

THE SECRETARY (Mr. G. D. Stewart) stated that there were a number of important changes in the first amendment to the National Formulary 1952. After September 1, where no quantity was given on a prescription for insulin, chemists would dispense 40-unit strength instead of 20-unit as formerly. The Committee recommended that the Board should draw the attention of chemists to the more important changes, and also that the Board should request the Formulary Committee to consider the desirability of issuing a separate edition of the new National Formulary for doctors from which could be omitted all information or directions intended only for chemists. The Committee agreed to a suggestion from the pharmacist that as the Board had not yet calculated the final balances to be paid for November and December 1952, and January 1953, chemists should be paid now, what was estimated to be due for those three months. A final settlement would be made with each chemist when the final figures were obtained.

It was also reported that experience since March 1953, had shown that an additional punched card machine was

necessary in the Pricing Bureau to merge the prescription cards with the appropriate master cards and to take out prescription cards for which there was no master card. It had been hoped that one of the other machines would do that work satisfactorily, in addition to its other functions, but difficulties had been encountered and the experts were now satisfied that an additional machine was necessary. The organisation and methods branch of the Ministry of Health and Local Government was understood to be in agreement. The normal period of delivery of the machine required was about four or five months, but the manufacturers hoped to reduce that and had already accepted a provisional order. The cost of hiring the machine would be £1,080 with a quarterly rental charge of £42 10s. thereafter. The Drug Pricing Committee recommended that the machine should be obtained as soon as possible.

A suggested alteration to the Code for cotton wools and lints and providing for one code number for each type and quantity instead of for each size was rejected.

THE SECRETARY submitted a prescription written by a doctor for Duracillin penicillin 300,000 units, mitte 10, to which the words "phials of 10 c.c." had been added by the chemist, and it was stated that the chemist had been paid for one phial containing 10 c.c. which was apparently what the doctor ordered. The Committee agreed that the chemist should be paid for the total quantity dispensed and that in similar circumstances the forms should be returned for clarification before payment.

Belfast Rota

MR. R. GIBSON reported that some chemists outside Belfast were willing to come on the Belfast rota list, and the Committee ruled that the list of the chemists concerned should be forwarded to the Local Pharmaceutical Committee for their observations.

The following were elected members of the Society: Messrs. James B. Fitzgerald, Eoin D. Leavy, Nathaniel E. Sutton, Miss Kathleen L. Murphy and Mrs. Mary Doherty. The Certificates of the following Dispensing Chemists and Druggists were signed and sealed: Messrs. J. J. Bridgeman, J. J. Costello, Hugh J. Gunn, George P. Hely, George E. A. Henry and Liam E. O'Leary. The following were nominated for Membership of the Society: Dr. Nora McGarry, St. Anne's Ballindine, co. Mayo; Thomas D. Higgins, 25 Castle Street, Tralee, co. Kerry; Maurice Collins, 8 Iona Drive, Glasnevin, Dublin; John M. Kelly, 2 Braemor Road, Rathgar, Dublin; and Jeremiah Carroll, 51 Barrack Street, Cork.

The following changes of address were notified:—

Messrs. T. D. Higgins, M.P.S.I., to 25 Castle Street, Tralee, co. Kerry; B. R. Bailey, M.P.S.I., to 13 Fairfield Park, Rathgar, Dublin; M. F. Walsh, M.P.S.I., to 212 Upper Kilmacud Road, Stillorgan, co. Dublin; and Mrs. Teresa Feely, L.P.S.I., to Dublin Road, Tuam, co. Galway.

At a meeting of the Benevolent Fund Committee held at the close of the Council meeting a number of grants were passed for payment.

The Board upheld a decision of the assistant secretary not to disclose to a company of chartered accountants details of a chemist's earnings.

The Board also accepted the opinion of the Medical Advisory Committee that an alkaliised milk compound should be regarded as a food.

THE PHARMACIST submitted to the same Committee prescriptions, some for 400 and others for 1,000 tablets, issued by a doctor for one of his patients. The doctor concerned had stated that he thought that was an economical way of prescribing. The Committee endorsed the action of the Medical Adviser in telling the doctor that he should not order more than a month's supply at a time.

Prescribing of Syringes

As a result of representations by doctors for patients requiring injections of hexamethonium twice daily it was recommended that the secretary should discuss with the Ministry the question of amending the list of prescribed appliances to allow the prescribing of syringes for self-administration of drugs other than insulin and adrenaline.

THE SECRETARY reported that following receipt of the new lists issued by the Cohen Committee the Medical Adviser was of opinion that it would greatly assist general practitioners if the Board issued one list in alphabetical order of all excluded or doubtful preparations, thus obviating the necessity for reference to a number of lists.

The Committee considered that such a list should be compiled and issued as soon as possible after the Committee had examined the new Cohen lists.

INFORMATION WANTED

The Editor would appreciate information about suppliers of the following items:

DORKO scissors and tweezers
TRAXATOR
KLOS sunburn preventive
OLITOYS sponges
Diabetic peppermints

TRADE NOTES

Inquiries Sought.—The Dales Tablet Makers, Ltd., Steeton, nr. Keighley, seek inquiries for supplies of aspirin tablets.

Stocks for Winter.—Hints on lines to stock up now, in preparation for winter demand are given on another page by Keldon, Ltd., Perivale, Middlesex.

Sole Distributors.—Dalmas, Ltd., Junior Street, Leicester, have become the sole distributors for Denpads, medicated pads for lower dentures. Samples are available on application.

Scottish and N. Ireland Agents.—Jacket et Cie (of Paris), Ltd., 11 Devon Street, Glasgow, C.5, are Scottish and North Ireland agents for Steiner Products, Ltd., and Roger & Gallet (London), Ltd.

Bonus Parcel.—Glaxo Laboratories, Ltd., Greenford, Middlesex, announce that a Farex bonus parcel will be available to chemists from September 14 until October 10. The parcel will contain thirty-two 10 oz. cartons.

Business Aids for Chemists.—The Shannon, Ltd., 121 Shannon Corner, New Malden, Surrey, give details of a new system in simplified economical account-keeping offered under the name Shannoleaf records. It is specially suitable for chemists.

Conversion Charts.—Copies of a permanent plastic Metric-Imperial conversion chart have been sent by Thornton & Ross, Ltd., Linthwaite, Huddersfield, to chemists on their books. Any chemist who indicates his interest in the chart can obtain one from the company.

Agencies in Lourenço Marques.—Farmacia Moderna, Avenida Pinheiro Chagas 91 B, Lourenço Marques, Portuguese East Africa, invite inquiries from manufacturers seeking distributors in that territory of penicillin, pharmaceutical chemicals, pharmaceutical and medical apparatus, etc.

Bonus Offers.—Cellucotton Products, Ltd., Carkers Lane, London, N.W.5, remind chemists that only 14 days are left in which to take advantage of the Kotex free goods offer. For the bonus offer on all orders for Moorland tablets W. B. Cartwright, Ltd., Rawdon, Leeds, state that only eleven days are left.

Sales Aid.—Cuxson, Gerrard & Co., Ltd., Oldbury, Birmingham, have introduced for Gynopax tablets the display stand illustrated, which is suitable for a bottle of twenty-five, 50 or 100 tablets, or a crescent of five tubes of twelve round the back of the platform. Small counter leaflets are available for supply to pharmacists. The product is on the C.F. list.



Smallest Inhaler.—Moore Medicinal Products, Ltd., 1 Queen's Terrace, Aberdeen, and 64 Gloucester Place, London, W.1, are introducing to doctors and chemists their Brovonet inhaler, stated to be "virtually the smallest inhaler on the market." It is easily carried in the pocket or handbag.

Stocks Exhausted.—Following an earlier Press notice announcing the discontinuance of Allenburys infants foods (see C. & D., June 27, p. 684) Allen & Hanburys, Ltd., Bethnal Green, London, E.2, now advise that stocks have become exhausted sooner than was anticipated. Manufacture has ceased, and no orders can be accepted after September 11.

Additions to Range.—Cuxson, Gerrard & Co., Ltd., Oldbury, Birmingham, have added to their list an intramammary suspension in two strengths: (i) 0·1 mega unit penicillin and 0·1 m.u. streptomycin sulphate, and (ii) 0·3 m.u. of each. Both are issued in 1-dr. tubes; a 10 per cent. chloramphenicol solution in 5-c.c., 10-c.c.,

and 25-c.c. dropper bottles and 50-c.c. and 100 c.c. injection bottles; 1 in. x 5 yd. and 2 in. x 10 yd. Adaptopruf waterproof plasters; penicillin eye ointment, B.P., 1953, in 1-dr., 2-dr., 4-dr. and 1-oz. containers; and calamine lotion, B.P., 1953, in 4-oz. and 8-oz. containers and in bulk.

Now in Cartridges.—Solutions of Kerocain (procaine hydrochloride, B.P.) are now available from the makers, Thomas Kerfoot & Co., Ltd., Vale of Bardsley, Lancs., in cartridges each containing 2 c.c., packed in aluminium containers of twenty-five as illustrated, and in boxes of 100.



NEW PRODUCTS AND PACKS

Medicated Rub.—Thomas Kerfoot & Co., Ltd., Vale of Bardsley, Ashton-under-Lyne, have added to their range Vapex medicated rub. It is attractively packed in glass jars and issued in colourful display outers of 1 doz.

Angina Preparation.—A new treatment of angina of effort, Bentonyl, is being introduced by Bengue & Co., Ltd., Mount Pleasant, Alperton, Wembley, Middlesex. It is packed in tube of fifty and dispensing pack of 250 mils.

Flavoured Malt and Oil.—In response to demand Allen & Hanburys, Ltd., Bethnal Green, London, E.2, are adding a butterscotch flavoured malt extract with cod-liver oil to their series. It is to be packed in jars of 1 and 2 lb.

Rat, Mouse Poison.—Thomas Harley, Ltd., Rodine Works, Perth, announce a new type of Rodine containing warfarin powder. The product as packed is ready for use and harmless to livestock or human beings if used as directed.

Tablets of Ferrous Gluconate.—Calmic, Ltd., Crewe Hall, Crewe, have introduced Cerevon tablets—a sugar coated ferrous gluconate tablet indicated in the treatment of essential iron deficiency anaemias. They are packed in bottles of 100 and 1,000 tablets.

New Hormone Preparation.—Roussel Laboratories, Ltd., 847 Harrow Road, London, N.W.10, are making available Androstalone, a new androgen of special value in gynaecology. It is given sublingually in Gloslettes each of which contains 25 mgm. The Gloslettes are packed in box of twelve and bottles of 100 and 500.

Anticoagulant.—Duncan, Flockhart & Co., Ltd., 104 Holyrood Road, Edinburgh, 8, are making available P.I.D.

(Duncan) brand of phenylindanidine, a synthetic anticoagulant for prophylaxis and treatment of thrombosis, embolism and thrombophlebitis. It is supplied in scored tablets each containing 50 mgm. in containers of twenty-five, 100 and 500 tablets.

New Formula.—Iron Jelloids are being presented in a new form containing extra vitamins. They combine adequate iron dosage with a high content of the B vitamin complex with extra aneurine, riboflavin, nicotinamide, and ascorbic acid. Each tablet (gr. 6 $\frac{1}{2}$) contains: Ferr. sulph. exsic., gr. 1·00; cupri carbonas, 0·17 mgm.; extract of cerevis. ferment. sicc. (1=7), 162·00 mgm.; aneurin. hydrochlor., 0·17 mgm.; riboflav., 0·29 mgm.; nicotinamide, 1·67 mgm.; acid. ascorb., 4·17 mgm. Sole distributors are Beecham (Northern), Ltd., St. Helens, Lancs.

Oral Aminophylline.—Riker Laboratories, Ltd., 29 Kirkewhite Street, Nottingham, have introduced Theodrox and Theodrox with phenobarbitone. Each tablet of Theodrox contains aminophylline, gr. 3, and dried aluminium hydroxide gel, 4 gr. Theodrox with phenobarbitone contains in addition phenobarbitone, gr. $\frac{1}{8}$. Both products are supplied in bottles of twenty-five tablets and in dispensing packs of 100 and 1,000 tablets.

Penicillin Oral Suspension.—Imperial Chemical (Pharmaceuticals), Ltd., Wilmslow, Manchester, are adding Dibencil oral suspension to their range of medical products on September 14. Dibencil oral suspension is a stable and pleasantly flavoured preparation of the newly developed salt of penicillin N:N'dibenzylethylenediamine dipenicillin G, ready for use. Each large teaspoonful (5 c.c.) contains 300,000 units. Dibencil is issued in bottles of 50 c.c.

PLANT FOR THE CHEMICAL INDUSTRY

A full range exhibited in London

MANUFACTURERS and suppliers of chemical plant formed a section of the Engineering, Marine and Welding Exhibition held at Olympia, London, September 3-17 and together presented a comprehensive range of engineering equipment. More than sixty exhibitors, members of the British Chemical Plant Manufacturers' Association were represented (see also *C. & D.*, September 5, p. 219). Although chemical plant exhibitors were conveniently grouped together in the Grand Hall many "regulars" to the exhibition were showing chemical plant on their usual stands.

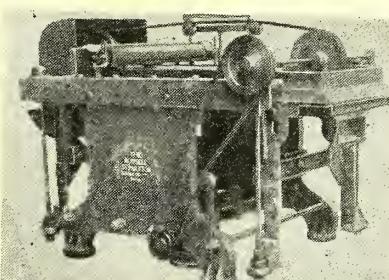
On the stand of WM. GARDENER & SONS (GLOUCESTER), LTD., Gloucester, was the Rapid sifter/mixer. Of all-steel construction, that totally-enclosed unit could be bolted to the floor. The brush, sieve and agitator can be removed readily, so leaving the interior of the machine clear for easy cleaning. The rate of discharge from the top feed hopper is controllable. The principal exhibit on the stand of QUICKFIT & QUARTZ, LTD., Stone, Staffs, was a large all-glass vacuum still, using steam as the heating medium. The plant provides the flexibility required in development and pilot-scale work, and, in addition, has wide use as production-scale plant in manufacturing fields where purity and close control of product are essential.

F. W. BERK & Co., LTD., London, featured drying equipment, including their patent pneumatic ring dryer for powdered, granular and flaky materials, crystals and filter cakes. The drying tube of the ring dryer is an endless duct, in which the product to be dried is held in airborne circulation, whilst

drying time, temperature, and moisture content are controlled accurately. The company's patent jet spray drier with a novel type atomiser and a built-in centrifugal powder collector was shown.

The increasing number of applications of industrial ceramics in the chemical and allied industries in recent years is reflected in the exhibits shown on the stand of DOULTON & CO., LTD., London. In addition to a number of items from the standard range of acid-proof chemical laboratory porcelain, chemical stoneware, and porous ceramics for filtration, diffusion and electrolytic processes, there was a demonstration of a pipe-line filter unit embodying porous ceramic filter elements, 1½ in. "fixed-flange" chemical stoneware piping, and a diaphragm pump.

STAINLESS STEEL VESSELS (LONDON), LTD., London, showed the Aeratone therapeutic bath for the treatment of circulatory and rheumatic diseases. It



Separator by Russell Constructions, Ltd., London

combines air, massage, warmth and water, for the application of a vibrating hydraulic massage.

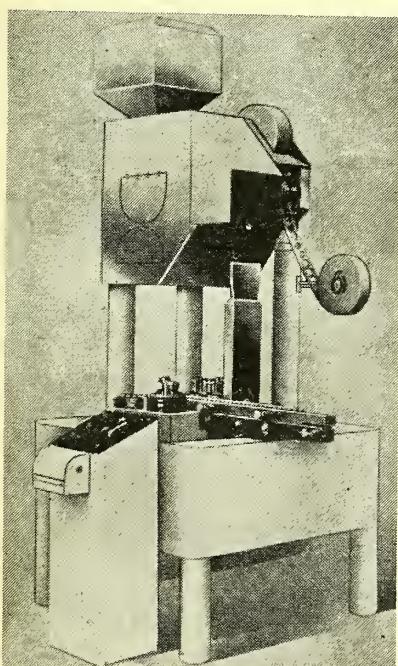
FORDS (FINSBURY), LTD., Bedford, displayed a fully-automatic vial capper that feeds aluminium caps down from a hopper holding a six-hour supply, through an electronically-controlled chute, on to the vials.

CANNON (HOLDINGS), LTD., Bilston, Staffs, showed a 50-gall. distillation plant complete with a 15 sq. ft. enamelled sectional type condenser and a 25-gall. enamelled receiver.

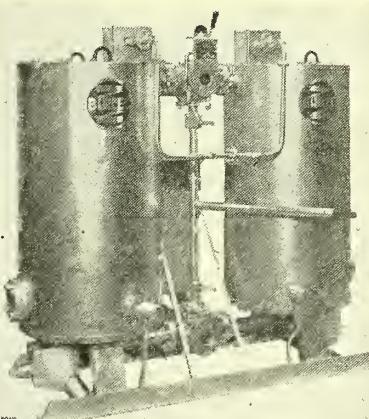
Lectrodryers for reducing the moisture content of air (particularly compressed air), other gases and certain organic liquids were shown by BIRLEC, LTD., Birmingham.

THOMAS BROADBENT & SONS, LTD., Huddersfield, showed a 30 in. inclined ploughing centrifugal (the type 80). The unit is suitable for batch treatment or semi-continuous operations.

A grinding mill, the Micronator, which will effectively reduce most materials down to a particle size of 1 μ (0.001 mm.) in a single batch operation, is now available from THE PASCALL ENGINEERING CO., LTD., London. The unit employs high frequency vibration, and consists of cylindrical porcelain or steel containers filled with porcelain or steel balls. The vibrations cause the balls to move up and down and to beat together at high speed. They



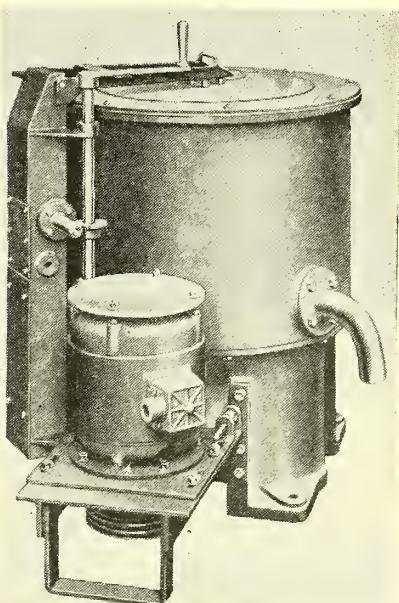
Fords vial capper and spinner (output: 8,000 vials per hour).



The BWC Birlec Lectrodryer for drying compressed air.

also rotate individually and turn as a mass inside the containers. The company also showed for the first time a triple roll mill embodying a simplified method of setting and adjusting the clearances between the rollers.

A patented heating unit for chemical process pilot plants requiring reaction temperatures up to 650° F. was a feature of the stand of HYGROTHERM ENGINEERING, LTD., London. The unit includes a 24-kilowatt heater, pump, interconnecting pipework and thermostatic controls and may be readily connected to a properly designed jacketed vessel or heat exchanger. The heater houses electric heating elements and is designed in conjunction with the motor-driven centrifugal circulating pump to ensure high velocity flow across the heat transfer surfaces of the patented fluid, tetra-aryl silicate 180.



Broadbent Type 86 21-in. rigid bearing centrifugal for chemical processing.

SEPTEMBER 19, 1953

The CHEMIST AND DRUGGIST SUPPLEMENT

Head Office: 28 Essex Street, Strand, London, W.C.2.

Telephone: Central 6565.

Telegrams: Chemicus, Estrand, London.

CLASSIFIED ADVERTISEMENTS MUST BE PREPAID. For rates see sectional headings

ORRIDGE & COMPANY

CHEMIST BUSINESS TRANSFER AGENTS AND VALUERS WHOLESALE AND RETAIL

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BUSINESSES FOR DISPOSAL

17/6 for 36 words (min.) then 4d. per word.
Box 2/-

HERBAL AND HYGIENIC STORES, main street, Bedford. Shop, house, low rent. Lease. Easy run counter sales. Genuine business. More than living guaranteed. Books kept. Price £3,000. Phone: Bedford 5430. C 4269

LONDON, W.11. Exceptional opportunity. Small pharmacy, with living accommodation, in residential area, near several doctors' surgeries. Stocks valued £800. Fixtures and fittings £500. Property could be purchased or leased. Goodwill free. Payment by instalments. Offers invited at 22 Kender St., London, S.E.14. C 4279

OLD-ESTABLISHED small wholesale and manufacturing business situated in the North of England. Turnover £28,000 per annum. Considerable scope for large increase. Valuable house and other trade marks relating to ethical and speciality products for sale to chemists and hospitals at home and abroad. Box C 4319.

OLD-ESTABLISHED DRUG and photographic business situated on busy main road, S.E. London. Good turnover. Unlimited scope for pharmacy. No opposition. Ample living accommodation. Price goodwill, etc., £2,500. S.A.V. Freehold available. Box C 4292.

WHOLESALE AND MANUFACTURING chemist's business, Bristol. Well-established wholesale connection. Scope for development. Manufacturing section includes businesses of John Durant and E.N.T. Commodious premises for sale or let on long lease. Ingoing excluding property £12,500. Further particulars E. T. Collins & Son, 28 Baldwin St., Bristol, 1. C 4323

APPOINTMENTS

18/- per half-inch (min.) and pro rata.
Box 2/-

BETHNAL GREEN HOSPITAL, CAMBRIDGE HEATH ROAD, LONDON, E.2

(General, 313 Beds)

Applications are invited for the post of PHARMACIST. Salary and conditions of service in accordance with Whitley Council recommendations.

Applications, with names of two referees, to the Secretary, Central Group Hospital Management Committee, 213 Kingsland Rd., London, E.2, as soon as possible. C 5940

MEARNSKIRK HOSPITAL, BY GLASGOW

PHARMACIST: Applications are invited for the post of Pharmacist at Mearnskirk Hospital, by Glasgow. Salary and conditions according to Whitley Council Scales. Applications, stating age, experience and qualifications to Surgeon Superintendent, Mearnskirk Hospital, by Glasgow. C 5948

CENTRAL MIDDLESEX HOSPITAL,

PARK ROYAL, LONDON, N.W.10

Applications are invited for the post of SENIOR PHARMACIST. Salary £525 x £25—£625 plus London Weighting and higher qualification allowance where appropriate. Applicants should be experienced in hospital pharmacy and be acquainted with modern sterilisation technique. Applications, stating age, qualifications, references and details of experience to be sent to the Chief Pharmacist as soon as possible. C 5923

CENTRAL MIDDLESEX HOSPITAL,

PARK ROYAL, LONDON, N.W.10

LOCUM PHARMACIST required for several weeks from September 28, 1953.

Apply, stating qualifications, experience, age and references to the Chief Pharmacist. C 5961

CRUMPSALL HOSPITAL, MANCHESTER, 8

(Adult General, 1,225 Beds)

Vacancies exist for two locum Pharmacists, and applications are invited for these posts. Rate of pay £12 12s. per week. Applications, stating age, nationality, details of experience, together with the names and addresses of two referees, are to be sent to the undersigned as soon as possible.

A. T. SAMPSON, Dept. 'C.D.',
Group Secretary. C 171

ENFIELD GROUP HOSPITAL MANAGEMENT COMMITTEE

Pharmacist required, Salary £450 (at age 23) x £25 to £575 plus £25 for additional recognised qualifications. Whitley conditions, applications giving full particulars and the names and addresses of two referees to the Secretary of the Management Committee, Chase Farm Hospital, The Ridgeway, Enfield, Middlesex, by October 3, 1953. C 5966

HACKNEY GROUP HOSPITAL MANAGEMENT COMMITTEE, LONDON, E.9

PHARMACISTS required for Hackney Hospital, Whitley Council salary and conditions. Applications to Secretary, Hackney Group Hospital Management Committee, London, E.9. C 156

NETHERNE HOSPITAL, COULSDON, SURREY

Applications are invited for the post of PHARMACIST. Salary scale and conditions of service in accordance with the Pharmaceutical Whitley Council recommendations. Commencing salary according to age and experience rising by £25 per annum to £75 per annum plus London Weighting. Applications with references or the names of two referees to the Physician Superintendent within fourteen days of the appearance of this advertisement. C 5945

184 STRAND, W.C.2

Tel.: TEMple Bar 9112/3 & 6340

OLDCHURCH HOSPITAL, ROMFORD

(722 Beds)

SENIOR PHARMACIST, M.P.S., required in this busy acute General Hospital with large Out-Patient Department and Consultant clinics. Previous hospital experience essential. Whitley Council salary.

Applications, stating age, qualifications, etc., and names of two referees, should be sent immediately to Secretary, Romford Group Hospital Management Committee, Oldchurch Hospital, Romford. C 5963

QUEEN CHARLOTTE'S AND CHELSEA HOSPITALS

QUEEN CHARLOTTE'S MATERNITY HOSPITAL, Goldhawk Road, London, W.6. Long-term Locum Pharmacist (female). Salary 12 guineas per week. Full board and lodging available for which an appropriate deduction can be made. Applications to the Secretary. C 5960

ROYAL INFIRMARY, EDINBURGH

Pharmacist required for Royal Infirmary, Edinburgh. Whitley Council salary and conditions. Full particulars to Chief Pharmacist. C 5943

ST. GEORGE'S HOSPITAL, S.W.1

Applications are invited for the post of Pharmacist at above teaching Hospital. Salary in accordance with the Pharmaceutical Whitley Council scale. Applications with full particulars to: Chief Pharmacist. C 5964

STOKE-ON-TRENT HOSPITAL MANAGEMENT COMMITTEE CITY GENERAL HOSPITAL, STOKE-ON-TRENT

Applications are invited for the post of Assistant in Dispensing. Salary in accordance with National Scales. Applications, giving full details including qualifications and experience, to the Secretary at the Hospital. C 5952

THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET, LONDON, W.C.1

PHARMACIST

Applications are invited for the post of Pharmacist at this hospital. Salary within the Pharmaceutical Whitley Council Scale (£450 x £25—£575) plus London Weighting. £25 for recognised higher qualification. Apply by letter to Chief Pharmacist. C 166

WEST MANCHESTER H.M.C., PARK HOSPITAL, DAVYHULME

SENIOR PHARMACIST (M.P.S.) required for modern department. Whitley Council conditions. Salary £550 x £25 (3)—£625. Forms from Secretary. C 167

Appointments—Continued**THE UNIVERSITY OF MANCHESTER**

Applications are invited from graduates in Pharmacy, especially from candidates with qualifications in Pharmacognosy, for at least one post of ASSISTANT LECTURER OR DEMONSTRATOR IN PHARMACY. The grade of appointment will depend upon qualifications and experience. The post offers opportunity for research leading to a higher degree. Salary not less than £450 per annum, with membership of F.S.S.U. and Children's Allowance Scheme. Applications should be sent not later than October 3, 1953, to the Registrar, the University, Manchester, 13, from whom further particulars and forms of application may be obtained. C 5965

WEST LONDON HOSPITAL, HAMMERSMITH ROAD, LONDON, W.6

SENIOR PHARMACIST (MALE) required to take charge of production, sterile preparation and stores at the above general teaching hospital, where there is a busy pharmaceutical department and a wide variety of experience is offered. Salary scale £525—£625 plus London Weighting. Other terms and conditions in accordance with Pharmaceutical Whiteley Council. Age, qualifications, experience, names two referees to Secretaries. C 5962

WEST MANCHESTER H.M.C., PARK HOSPITAL, DAVYHULME PRE- or POST-GRADUATE STUDENT PHARMACIST required. Further details and forms from Secretary. C 5920

SITUATIONS OPEN

8/6 for 36 words (min.) then 3d. per word.
Box 2/-

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she, or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952.

RETAIL (HOME)

AYLESBURY. Rouse's of Aylesbury require a young male assistant pharmacist. Our pharmacy is fitted with up-to-date laboratory equipment, sterilisers, etc., and we have two qualified and two unqualified on staff. Hours 9 to 5.30. Rota duty one week in six. Three weeks' holiday with pay. This post will suit keen man willing to gain good experience. Good salary to right applicant. Write, in first instance, to: Mr. W. Rouse, M.P.S., Chemist, 34 High St., Aylesbury, Bucks. C 4316

BIRMINGHAM, CENTRE. Proprietors understand, lady used to trade, competent control office own initiative and take intelligent interest in general running of business, bookkeeping, typing, P.A.Y.E., statistics, trial balance. Full-time shop hours, Wednesday half-day, congenial post, Galloways, Photographic Chemists, Victoria Square. C 4297

CHISWICK, W.4. Unqualified lady assistant wanted for dispensing and counter. No Sunday or half-day duties. State experience and salary required. Commission on own lines. Send photo. C. W. J. Watkins, M.P.S., 3 Stile Hall Parade. C 4305

KENT. Pharmacist required to take charge of busy dispensary in well staffed pharmacy. Permanent position with superannuation scheme. House purchased if necessary. Stonham & Son, Ltd., 70 Banks St., Maidstone. C 4315

KENT. Unqualified dispensing assistant required. Permanent position and superannuation scheme. Box C 4314.

LADY ASSISTANT REQUIRED, good wages, permanency. Haigh Chemist, 4 Queensway, Bayswater. C 4266

LIVERPOOL. Qualified manager required for new pharmacy, permanent position. Salary £800 per annum. No Sunday or half-day closing duties, full counter staff and dispensing assistant engaged. Apply to Metcalfe & Co. (Liverpool), Ltd., 34 Landford Avenue, Liverpool, 9. C 4143

PHARMACIST required as branch manager. Salary up to £14 14s. per week, plus house accommodation. Average trade £170 weekly. Applications with full particulars to: General Manager, Co-operative Society, Ltd., Pontypool, Mon. C 4260

LONDON CO-OPERATIVE CHEMISTS LTD., by reason of development have several vacancies for experienced pharmacists in various parts of London. The positions would be permanent and progressive with a commensurate salary for the duties involved. Accommodation would be available at a nominal rental. Applications in first instance to Chief Pharmacist, Grange Road, Leyton, London, E.10. C 4295

NEWCASTLE-ON-TYNE. Pharmacist manager required for branch pharmacy city suburb. Rota one week per month, no Sunday duties. Modern shop and dispensary, easily run. Salary £700 per annum plus rota payments. Regret no accommodation. Apply, giving full particulars prior to interview. Box C 4296.

NORTH LONDON. Unqualified assistant required as dispenser. Salary plus bonus. Hours 9 a.m. to 6 p.m. Permanency. Three weeks' holiday a year. Apply with full particulars of previous experience to A. R. Cross, Ltd., 476 Hertford Rd., Enfield, or telephone Howard 1723 and 2916 for an appointment. C 4331

OXFORDSHIRE. Dispenser - Receptionist (female) wanted for country practice of three doctors near Oxford. Hall qualification preferred. Start October. Salary and accommodation by arrangement. Box C 4317.

PHARMACIST MANAGER required. Position offers excellent prospects for keen pharmacist with a view to eventual succession. Excellent starting salary, rising in proportion to increase in business. Interview preferred when all details can be discussed. Box C 4282.

QUALIFIED MANAGER required for London E. district. Salary and share of profits offered to approximate to £1,000 per year. Also flat above shop. Good scope for an energetic man to increase present turnover. Full particulars to Box C 4322.

RADNORSHIRE. Pharmacist-manager required for developing business in congenial agricultural area; living accommodation is available, and the successful applicant will be given the opportunity of acquiring a financial interest either immediately or at a later date, according to his desires; remuneration by way of salary and share of net profit. Please write initially under guaranteed assurance of confidence to Box C 5939.

SCOTLAND, Isle of Skye, Portree. Pharmacist wanted to manage pharmacy branch. Good salary with superannuation scheme in operation. Five-apartment villa with bathroom, electric light, is available at reasonable rent. Knowledge of veterinary and horticultural trade an asset. Applications, in writing, stating age, experience and when available for interview to: The Manager, Retail Drug Dept., S.C.W.S., Ltd., 187 Bogmoor Rd., Shielhill, Glasgow, S.W.1. C 4309

SOUTH KENSINGTON. Young lady; experienced high-class cosmetics, etc.; congenial post. Good prospects right type; permanency. Tel.: Ken. 8788 or write Harveys Chemists, 37 Old Brompton Road, S.W.7. C 4326

WANTED. Pharmacists to take charge of chemist shop. Accommodation available for single man. Please apply to Turner & Sons (Cambridge), Ltd., Head office: 36 Trinity Street, Cambridge, stating wages required. C 169

YORK CO-OPERATIVE Chemists' Society, Ltd., require qualified branch manager, male or female. Salary and bonus, commission on dispensing and rota fees. Superannuation scheme, transfer clause. Good conditions. Living accommodation available. Applications, giving full particulars to York Co-operative Chemists' Society, Ltd., 22 Railway Street, York. C 4223

LOCUMS WANTED

BIRMINGHAM. Qualified locum for long or short periods until permanent manager/ess is found. Shop well staffed. Optical work available if desired. Apply W. Beck & Sons, Ltd., 75 Winsom Green Road, Birmingham, 18. Phone: Edgbaston 1839. C 4263

QUALIFIED LOCUM required for a period of four or five months (commencing about October 1) to take over the management of a business in Radnorshire. Please communicate initially with J. E. Crowe, M.P.S., 93 Falsgrave Rd., Scarborough, Yorks. Telephone: Scarborough 118. C 5937

RETAIL (OVERSEAS)

A QUALIFIED MAN, preferably single, required to manage important English pharmacy in Hong Kong. Only men who have received a first-class training in all branches of pharmacy need apply. Living accommodation, staff pension scheme, passage paid. Excellent prospects for the right man. Reply A. S. Watson & Co., Ltd., 64 Crutched Friars, London, E.C.3. C 5862

WHOLESALE

A PHARMACEUTICAL ASSOCIATION requires the services of a man age about 30 as a trainee for office duties in London and thereafter outside representation. The applicants must be of good education and address with approximately 5 years' experience in pharmacy. The duties may entail a considerable amount of travelling in Great Britain. Commencing salary around £450 per annum, according to experience, plus expenses when engaged on outside duties. The appointment will be for a probationary period of 6 months in the first instance. All replies will be treated in strictest confidence. Box C 4322.

A QUALIFIED industrial chemist is required and should be capable of progressing to the position of Chief Chemist. He should preferably have experience of extrusion plastics and/or cable making. Salary according to qualifications and experience; the appointment is permanent and pensionable. Box C 4287.

CHEMICAL EXPORTERS require energetic gentleman fully conversant with overseas markets. Progressive and permanent position. Box C 5954.

QUALIFIED CHEMIST REQUIRED by firm of manufacturing chemists in north-west England for the control of quality of medicinal products and their raw materials. Salary according to qualifications and experience. Applications to Box C 4307.

EXPORT: Assistant required age 25 to 35 in London office with knowledge of disinfectant trade, excellent opportunity to progress. Applicants to give full details of education, previous business experience and salary required. Apply Box C 5959.

EXPORT SALES MANAGER (under 40) required by important ethical manufacturing chemists (London). Previous overall experience of marketing ethical specialties abroad, pharmaceutical qualification or knowledge therapeutics and one or more foreign languages desirable. Possibility foreign travel. Good salary and prospects; pension scheme. Only applications, preferably handwritten, giving fullest details will be considered. Box C 4303.

LEEDS AREA. Representative required by London firm, must have good knowledge of surgical instruments and hospital equipment. Previous experience essential and connections an advantage. Good salary and bonus, with car if required, for suitable applicant. Apply JGE Dept., Box C 5806.

MANUFACTURING CHEMISTS in E. Yorkshire require general supervisor with wet and dry counter experience. Must have pharmaceutical works training. Permanent position with pension scheme for suitable man or woman. Full particulars to Box C 4270.

MEDICAL AND SALES REPRESENTATIVES required by old-established firm of manufacturing chemists with widely advertised lines. Applications are invited from gentlemen of proven sales record and with experience of calling on the Medical Profession. Full particulars to Box C 5958.

MEDICAL REPRESENTATION. A well-known ethical house require the service of a first-class man to represent them on the territory comprising Glasgow and district. Previous experience or pharmaceutical qualification not essential but applicants must have sound technical background, reside on and know the territory well. Write giving full particulars in confidence to Box C 5946.

MEDICAL REPRESENTATIVE required by London house to visit doctors, hospitals and chemists in Greater London. Applicants must have had good-class dispensing and pharmacy training and should have an adequate knowledge of pharmacology and of medical terminology. Men between the ages of 25 and 35 are invited to apply, and details of age, experience and salary required should be stated. Box C 170.

MEDICAL REPRESENTATIVE: Eli Lilly & Co., Ltd., invite applications from keen pharmacists under 35 years of age for the position of medical representative to contact doctors, hospitals, and retail chemists in West London. The position is progressive and pensionable. Previous experience is not essential. Please send full particulars to Eli Lilly & Co., Ltd., Basingstoke, Hants. C 5956

NORTH SOMERSET AND GLOUCESTER AREA. A well-known ethical house invite applications for the position of medical representative on this territory. Previous experience while desirable is not essential but applicants should reside on and know the territory well, have a good pharmaceutical background and preferably be car owner. Full details in confidence to Box C 5891.

WM. FREEMAN AND CO. LTD.,

Manufacturers of SUBA-SEAL moulded Rubber Chemist Products, and SUBA-MAID Rubberised Houseware, require an experienced Sales Representative to cover the counties of Northumberland, Durham, Cumberland, Westmorland, and the North and East Ridings of Yorkshire.

Applicants should possess strong personal connections with Chemists, Hardware Dealers, Ironmongers, and Stores. Age limit 45. Car necessary.

Remuneration by salary, commission, and expenses, with excellent future prospects.

Apply, in first instance, in writing, giving full particulars of past experience, to

WM. FREEMAN AND CO. LTD.,
Suba-Seal Works, Peel Street, BARNSLEY, Yorks.

C5951

Situations Open—Continued

MEDICAL REPRESENTATIVES. Experienced medical representatives are required by a company marketing a unique range of ethical products, for the following territories:—Middlesex; Birmingham and surrounding districts; South Wales. The positions offer an excellent opportunity for ambitious and energetic men to join a young company which is just beginning to expand. A generous salary will be paid and a car is provided. There is a company pension scheme. Applicants, under 40 years of age, apply in writing to Box C 5935.

PRICER/INVOICE CLERK, either sex, fully experienced in drugs, ethicals, proprietaries, tablets, chemists' sundries. Good at figures, permanency. Unusual opportunities. Apply with full particulars to Biorex Laboratories, Ltd., 47/51 Exmouth St., E.C.1. Phone Terminus 5216. C 5953

TABLET MAKER with all-round experience required by N.W. London manufacturing chemists. Write, stating age, experience and salary required. Box C 5936.

WHOLESALE (OVERSEAS)

A QUALIFIED MAN, preferably single, required to supervise manufacturing laboratory in Hong Kong. Ample scope for the right man to show his initiative. Living accommodation, staff pension scheme, passage paid. Reply A. S. Watson & Co., Ltd., 64 Crutched Friars, London, E.C.3. C 5863

BRITISH WEST AFRICA/REPRESENTATIVES. May & Baker, Ltd., Dagenham, Essex, invite applications from young single pharmacists (23-30 years) with sound commercial background in retail and/or hospital practice. These positions offer interesting and progressive careers to men of character and integrity and entail short tours of duty within the colonies with generous home leave. Duties consist of the promotion of the company's products to the medical profession, hospitals, retail and wholesale trade. Training will be given prior to appointment overseas. Apply, initially, in writing, giving full details of qualifications and experience to the Personnel Officer. C 5922

THE OPPORTUNITY of a lifetime awaits a young pharmacist or dispenser in British East Africa. Exceptionally good prospects and terms are offered to the right man in rapidly developing market. Full particulars obtainable from Box C 4310.

SITUATIONS WANTED

3/- for 18 words (min.) then 2d. per word.
Box 1/-

RETAIL (HOME)

DISPENSER, unqualified, age 36, 16 years good experience less war service, requires position north-east London. Highest refs. Box C 4308.

SENIOR QUALIFIED OPTICIAN invites pro-

position for one or two days weekly. Registered C.P.C. London area. Box C 4320.

WHOLESALE

GENTLEMAN, with extensive experience of the pharmaceutical trade, retail, wholesales and manufacturing, factory, office and sales management, with export and import experience, seeks executive position with good firm. Box C 4302.

THE CHAS. H. PHILLIPS CHEMICAL CO., LTD.,

require the services of four additional representatives in the following territories:

1. Essex, E. London and S. Suffolk.
2. Middlesex, Berks, Bucks, Herts and Oxford.
3. Nottingham, N. Leics, S. Derby and Lincs.
4. S.E. Lancs and N.E. Cheshire.

Applications are invited from gentlemen with a good retail pharmaceutical background and who must be resident on the territory. Duties involve the cultivation of wholesale and retail chemists and other traders as well as a certain amount of professional propaganda in well developed territories. A car is provided. Remuneration by salary and expenses. Address your letter to the Sales Director, giving age and full particulars of experience to date.

179 ACTON VALE, LONDON, W.3

C 5967

KEEN, ACTIVE MAN (39), smart appearance, 20 years all-round experience chemists' trade, good salesman. Clean driving licence. Desires post as representative. Would work inside for short period if necessary. Northern England, Southern Counties or South Wales in preference. Box C 4321.

WELL-KNOWN SOUTH WALES chemists' representative requires change of position. Excellent connection with all chemists. All lines considered. Box C 4318.

AGENCIES

17/6 for 36 words (min.) then 4d. per word.
Box 2/-

AGENTS REQUIRED (all territories) with wholesale connection with the following trades—Grocery, Stationery, Hardware, Chemists—to handle nationally advertised, quick-selling products. References essential. Box No. AC 81768, Samson Clarks, 57/61 Mortimer Street, London, W.1. C 157

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BABY PRODUCTS: Established agent in Ireland seeks additional first-class agencies, 100 per cent. chemists' a/c's throughout the Republic. Apply Box C 4312.

MANAGING proprietor of an importing firm in Malta will be in London middle September seeking new connections. Interested firms not represented in the above market are asked to write for appointment, c/o Box C 4278.

WANTED

17/6 for 36 words (min.) then 4d. per word.
Box 2/-

ALL KINDS OF BOTTLES, JARS, SCREW CAPS, cartons, packaging materials and manufacturers' stocks of all kinds bought at fair prices for spot cash. We are buyers of merchandise of **EVERY DESCRIPTION.** Clearance Stocks, Discontinued Lines, Surplus and Redundant Stocks. Should you have anything for disposal, please send us samples and particulars. Reliance Trading Co., 13 New College Parade, Finchley Road, N.W.3. C 153

BOTTLES, JARS AND CLOSURES purchased for cash; we take this opportunity of advising you that we are open to purchase all stocks of medical bottles, screw caps, gummed tapes and other packaging materials. For top prices communicate, with samples, to Noel Davold & Co., 9 Laurence Pountney Lane, Cannon St., E.C.4, Man. 3951-2. C 162

WANTED: Mexican "WG" Rosin. Rapeseed oil, all types: 10 tons Ammonium Chloride, 99/100% fine white crystals in strong sound export bags of 1½ cwt.s, net. Copper Sulphate, 98/100% large crystals in 2-cwt. bags, carriage paid Bristol/London/Liverpool. Lithium Carbonate. Box C 5944.

WANTED: Up to 20 tons British ammonium chloride 98/100 per cent., fine white crystals packed in sound single bags of 1-cwt. net; cyanide of potash 96/98 per cent.; copper cyanide; chromic acid flakes 99.5 per cent.; sodium bichromate crystals 67/68 per cent. cro. 3, Box C 5949.

WANTED: 25 tons of phthalic anhydride; triethanolamine; powdered sulphur 1 and 2 grades; American FF wood rosin; pine tar; pine oil; sodium acetate, genuine English anatase and rutile titanium dioxide; sodium chloride in 1-cwt. packages. Box C 5950.

WANTED: Surplus or redundant merchandise, clearance goods of any description or discontinued lines. Cash immediately, no delay. Our representative will be pleased to call or, alternatively, please send samples with particulars, quantity and price. Lawrence Edwards & Co., Ltd., 6-7 Wellington Close, Ledbury Rd., London, W.11. Telephone Bayswater 4020. C 140

BUSINESS OPPORTUNITIES

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Box 2/-

FOR SALE: Limited company, old-established, selling medicinal tablets. Tax loss, £7,200. Box C 4306.

MANUFACTURING CHEMISTS invite inquiries for the manufacture, packing, etc., of private formulae preparations, liquids, powders, tablets. Dispatch facilities available with own printing department. Frank Macowal & Yanatas, Ltd., Wilshaw St., London, S.E.14. Tel.: Tideway 3846-8. C 122

RETAIL AND MULTIPLE CHEMISTS are invited to apply for agency in nationally advertised lines. Box C 4298.

MISCELLANEOUS SALES

17/6 for 36 words (min.) then 4d. per word.
Box 2/-

BOTTLES. For immediate clearance, 30,000 unused Winchesters (80 fl. oz.) pale green fluted or plain with ground glass or patent rubber stoppers if required. Offered at "knock out" prices for prompt deliveries. Maritol Trading, 70 Mackets Lane, Hunts Cross, Liverpool (Hun 1669). C 5955

FOR SALE: Tartaric acid B.P. powder and granular available for prompt and forward delivery. Apply Box C 4324.

MODERN CHEMIST SHOP fittings, drug ranges, wallcases and frameless sliding doors, display counters and showcases; all styles of window fittings and display stands. D. Matthews & Son, Ltd., Complete Chemist Shop Fitters and Shop Front Builders, 14-16 Manchester St., Liverpool. C 141

OPTICIANS! For a comprehensive prescription service try Sheaf Optical Works, Ltd., 49 South St., Sheffield, 2 (telephone: 24434). Solid and fused bifocals and rimless work a specialty. C 154

PERFUME BOTTLES, ½ dram, 1 dram, bakelite cap, 6/700 gross 1 oz. cylindrical; 500 gross Gravfil filling machines. High grade opal jars, 200 gross. D. L. Perrott & Co., Ltd., 30 Holborn, E.C.1. C 4323

RE A. A. KENNEDY, LTD.. Lambourn, Berks. A certain amount of optical equipment and stock is for disposal, and offers are invited; can be inspected on premises (telephone: Lambourn 64) or preliminary details obtained from Ernest J. George & Co., 329 High Holborn, London, W.C.1. C 5938

'UNISEC' from the Single
Unit to the Complete Pharmacy
WRITE FOR YOUR COPY OF THE STANDARD
REFERENCE OF PHARMACY FITTING

MYERS of OLD ST.
133/5 & 141/7 OLD STREET, LONDON, E.C.I

Miscellaneous Sales—Continued

STAINLESS STEEL VESSELS. 3-gallon capacity, complete with lids and handles, no creases, 500 available, inquiries any number to Box C 5957.

MISCELLANEOUS

CAN SUPPLY choicest dried fruits, drugs, herbs, spices, vegetables and other natural products in all quantities. Post parcels and bulk packages by experts. Write for quotations and samples to T. S. Thakur & Co., Saddar, Delhi, India. C 4311

SHOWCARDS, price tickets, etc., printed on plastic or cardboard. Minimum quantity, 3 doz. Send a rough outline for quotation. Milbourne, 627 High Rd., Tottenham, London, N.17. C 4238

ATTENTION, PHOTOGRAPHIC CHEMISTS,**IS YOUR D. & P. SERVICE RELIABLE AND PROMPT?**

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Write immediately:
Walsh's Photographics, 43A Ashcombe Rd., Weston-super-Mare. C 4313**IMPORTANT**

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THE GUILD OF DISPENSERS aims at statutory recognition for unregistered dispensers who join our non-trade union organisation. Annual membership 2s. 6d. only. Details: Secretary, 41 Connaught Sq., Marble Arch, W.2. C 4262

STOCKTAKING

17/6 for 36 words (min.) then 4d. per word.
Box 2/-

QUIET AND ACCURATE workmanship. Over 30 years' practical experience. Detailed inventories supplied to suit your individual requirements. Your own stock sheets priced. Terms moderate. C. W. Playfoot, 8 Aylward Rd., London, S.W.20, Phone Liberty 4104, C 4213

The C and D WEEKLY LIST OF PRICE CHANGES

A = Advanced; R = Reduced; I.R.P. = Inclusive Retail Price; * = Tax 25 per cent.; † = Tax 75 per cent.

ALLEN & HANBURYS, LTD. (from September 14)

	Doz.	I.R.P.
Injection mersalyl, B.P.	29 0	3 6 R
6 x 1 c.c.	Each	
100 x 1 c.c.	27 0	40 6 R
	Doz.	
6 x 2 c.c.	35 0	4 3 R
	Each	
100 x 2 c.c.	33 0	49 6 R

BEECHAM (NORTHERN), LTD.

	Doz.	I.R.P.
Iron Jelloids, new formula	16 8	1 9
	43 0	4 6

CALMIC, LTD.

	Each	I.R.P.
Cerevon tablets*	100	3 2

*1,000 29 8

CUXSON, GERRARD & CO., LTD.

	Penicillin oral tablets	I.R.P.
10,000 units	10 1 0 R	
	20 1 6 R	
	100 4 3 R	
20,000 units	10 1 3 R	
	20 2 3 R	
	100 8 0 R	
40,000 units	10 2 0 R	
	20 3 9 R	
	100 15 6 R	
50,000 units	10 2 3 R	
	20 4 0 R	
	100 17 0 R	
100,000 units	10 3 0 R	
	20 5 6 R	
	100 26 6 R	
200,000 units	10 3 9 R	
	20 7 3 R	
	100 32 10 R	
500,000 units	10 10 3 R	
	20 19 0 R	
	100 87 6 R	
1,000,000 units	10 19 6 R	
	20 38 0 R	
	100 175 0 R	

DALMAS, LTD.

Dalmas dumb bell non-stitch sutures, gross

	Each	I.R.P.
	10 0	14 0 A

For 100 suppositories 2 x 50 are issued.

PAINES & BYRNE, LTD.

Khellanals suppositories

	50 mgm.	I.R.P.
	6	6 0 R
	12	11 0 R
	50	42 0 R
	100	82 0 R
200 mgm.	6	9 0 R
	12	17 0 R
	50	66 0 R
	100	130 0 R

PARKE, DAVIS & CO., LTD. (from September 7)

	Doz.	I.R.P.
Vitaminor capsules	100	46 3 R
	Each	
	1,000	31 0 R

PHARMACEUTICAL SPECIALITIES (MAY & BAKER), LTD. (To trade from September 14; to public from October 12)

	Doz.	I.R.P.
Sulphatriad tablets	25	3 9 R
	100	14 6 R
	500	69 0 R

SHARP & DOHME, LTD. (purchase tax imposition from September 7)

	Doz.	I.R.P.
Cadrosin tablets*	100	10 6 A
	1,000	87 6 A

NEW PRODUCTS AND PACKS

ALLEN & HANBURYS, LTD.

Allenbrys malt extract with cod-liver oil, butter-scotch flavour	1-lb.	22 9	2 5½
	2-lb.	43 0	4 8½

CHRISTIE, GEORGE & CO., LTD.

Mynobalm	1-oz.	3 0
	2-oz.	4 6
	4-oz.	7 6

CUXSON, GERRARD & CO., LTD.

Intra-mammary suspension	0.1 mega penicillin plus 0.1 mega streptomycin sulphate	1-drm.	12 6
0.3 mega of each antibiotic		1-drm.	24 0

DUNCAN, FLOCKHART & CO., LTD.

P.I.D. (Duncan) phenylindandione tablets	25	9 6
	100	32 6

EVANS, MARSHALL & CO., LTD.

Perrier table water	large	60 0	2 8
	medium	64 0	1 10
	splits	94 0	1 4

IMPERIAL CHEMICAL (PHARMACEUTICALS), LTD. (from September 14)

Dibencil oral suspension	50-c.c.	200 0	25 0
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PAINES & BYRNE, LTD.

Khellanals suppositories	100 mgm.	6	7 0
	12	12	13 0
	50	50	50 0
	100	100	98 0

RIKER LABORATORIES, LTD.

Theodrox tablets*	25	5 10
	100	10 0
	1,000	80 0
Theodrox with phenobarbitone*	25	6 5
	100	10 8
	1,000	84 0

THOMAS KERFOOT & CO., LTD.

Vapex medicated rub*	111
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Printed by THE HAYCOCK PRESS, LTD., 106-140 Neate Street, Camberwell, S.E.5,
and published by the Proprietors, MORGAN BROTHERS (PUBLISHERS), LIMITED, at 28 Essex Street, Strand, London, W.C.2.



The CHEMIST AND DRUGGIST

For Retailer, Wholesaler and Manufacturer
ESTABLISHED 1859

Published weekly at
28 Essex Street, Strand, London, W.C.2

TELEPHONE CENTRAL 6565

TELEGRAMS: "CHEMICUS ESTRAND, LONDON"

Shortcomings of Practical Training

THE first subject chosen by the Council of the Pharmaceutical Society, in accordance with well-established practice, for 1953's second Branch Representatives' meeting, proved to be entirely in the spirit of the meeting. We give credit to the Council for being really desirous of testing the pulse of the profession on the success or otherwise of the present arrangements for requiring a period of practical training before issuing a certificate of registration as a pharmacist, and acquit them of the charge some critics laid against them, even this year, of so staging the agenda as to minimise or thwart criticism. If that was in fact their intention, they failed to silence their critics even among the authors of the introductory papers, by whom some strongly held views were trenchantly expressed, regardless of any reaction they might provoke.

The subject of practical training, and whether it should be taken before or after graduation was, it is true, of strong and exceptional intrinsic interest, and we hope that the Council is now finally convinced of the folly of trying to devise an innocuous, non-controversial agenda for these meetings. What came out of the discussion on September 3 was certainly a call for action that might otherwise have gone unheard.

It was obviously to be expected in advance that pharmacists engaged in retail, hospital and manufacturing pharmacy and in teaching would have widely divergent views on practical training. Different they were, but by no means irreconcilable, and they revealed important points of agreement. There were advocates for the pre-graduate and advocates for the post-graduate apprenticeship, but hardly a good word was said for the short duration of the present post-graduate apprenticeship. On all sides the call was to lengthen it, and a demand of such unanimity must be treated with the utmost respect, and it may confidently be expected that steps will be taken before very long to modify the present regulations. The small degree of supervision during the pre-registration year was also widely attacked, and the Council will show readiness, we feel sure, to exercise a greater authority there in the future. It is of note that the steps outlined by Mr. A. T. Sissons as having been initiated in Australia appear to be achieving the object of making the entrant to pharmacy conscious that the period of practical training is an essential ingredient of his pharmaceutical graduation, and not the burdensome obstacle to recognition that many graduates in Britain today hold it to be. The Austra-

lian system of supervision of the student by the pharmacy school throughout his period in the shop or department appears to have much in common with what Mr. H. S. Grainger urged should be done.

If the practical training period should be standardised for students at two years—and to leave it as it is would be to do what several speakers deprecated, namely differentiate between one class of entrant and another—there is much to commend Swansea's suggestion of one year before and one after graduation, though it is not difficult to see practical obstacles to its adoption. No doubt the Council will "have a look at it." Leeds Branch complained of having had a resolution suppressed that called for action which would have had very much the same effect, though by a very different method. Other points that came out strongly in the discussion were that the present system fails to give to all entrants those contacts with the public that are necessary for converting a mere graduate into a responsible pharmacist; that loopholes still exist through which unsuitable students enter, some of them lingering on far too long before discovering their unsuitability; and that it is possible under the present rules for a graduate to pass on to the register after a practical training not extending beyond a specialised department of manufacture such as surgical dressings. The Council has in fact been given plenty to think about and cannot allow things to remain as they are.

Tracking the Cold Virus

THE main reward to the workers on the common cold for their seven years application to their task is that at last a means has been found of cultivating the common cold virus in the laboratory, and that there are prospects that the virus may be studied more closely. Up to the present, the only system in which it had been made to grow was the human being. The next step forward is to devise means of identifying the presence of virus in culture directly. Now the presence is deduced from the ability of cultures to produce a common cold in a volunteer. The fact that virus has been cultivated artificially has also been deduced—from the observation that preparations have been made that are active enough to cause colds but which contain the original virus diluted to beyond the point where it is infective. A possible method of recognising the presence or growth of virus is by visualising with the aid of an electron microscope, and it is understood that this method is being pursued. The next objective can only be attained if an adequate flow of volunteers to the Harvard Hospital Common Cold Research Unit is maintained. The extent to which that volunteer work has been supported is shown by the fact that since the Unit began its work, 2,496 volunteers have taken part in the trials. The Ministry say that exactly half were women, and that there had been 274 married couples. The fact that 563 volunteers have paid two, and 334 volunteers three or more visits to the Unit speaks for itself.

A Commendable Safety Enterprise

THE newly published booklet on the marking of containers of hazardous chemicals is the result of several years' work by the Association of British Chemical Manufacturers. A close study was made of the practices for warning labelling in other countries, and it

was decided that the needs of the British chemical industry could best be met by compiling a scheme similar to one which has been successfully operated for several years in the United States.

For the time being the labels specified will be additional to those required by law or by carriers, but the possibility of integration is being examined; and indeed it is a possibility that would seem to commend itself. It should be noted that the booklet does not give any interpretation of the requirements of the Poisons Act, although arrangements are outlined for the inclusion of Poisons Act wording within the warning label.

The A.B.C.M. describe their labels as "handler and

Onward from Galen A CURRENT CAUSERIE

THOSE concerned in improving the condition of service of pharmacists within H.M. Forces will no doubt be stimulated to increase their efforts, if possible, by the news that a Government Committee is reviewing the arrangements for providing medical and dental services in the Forces and that steps to attract more doctors to them are being taken. From October 1, improved rates of pay for service doctors are being granted and in the Royal Air Force specialists are to enjoy quicker promotion. Furthermore, as a temporary measure a grant of £1,500 for permanent commissions is being introduced. For dentists, similar arrangements are being adopted. The Ministry of Defence states that the examination of the problem will take some time and the above steps are being taken meantime to attract medical men to a Service career.



ADDRESSING the British Direct Mail Advertising Association recently on ethical medical advertising, Mr. R. F. Severn, advertising manager, Abbott Laboratories, Ltd., warned government planners not to carry economies too far, or "you will retard the advances of medicine." The successful marketing of medical products in Great Britain and overseas brought more than prosperity to the pharmaceutical industry, he reminded his audience, for with it came relief to the suffering. To be effective, advertisement mailing to doctors (an activity that has come under fire recently), should be of material that is as attractive as possible, in Mr. Severn's opinion, for the medical profession receive such a "barrage" of direct mail and has become impervious to the "dull presentation" often thought to appeal because it was "dignified." In publicising ethical products he wisely does not overlook the information that pharmacists can give doctors in answer to their questions. The pharmaceutical trade Press from which the pharmacists obtain the facts was "vital" for the purpose of the publicising of ethicals.



SPEAKING at the Banquet of the Pharmaceutical Conference, on September 1, Dr. G. R. Boyes (Conference chairman), referred to a paper that had been read at a science session earlier that day in which the phenomenon of plant chimeras was mentioned. The authors had reported the presence of solanaceous alkaloids in amounts comparable with those found in normal plants of *Datura* in all parts of a tomato scion grafted on to a *Datura* stock. Here, suggested Dr. Boyes, was a ready-made plot for a writer of detective novels. In point of fact it is surprising that the plot has not been employed—if indeed it has not—because research on such phenomena dates back to 1907 at latest for in that year Hans Winkler grafted black nightshade (*Solanum nigrum*) on tomato. He found, however, that the plant bore—histologically at least—typical tomato and typical black nightshade shoots.

user" labels, to differentiate them from "transporter" labels, such as those in operation by British Railways. The new labels, which are for the home trade only, should not be confused with those that are being considered for international transport purposes (see *C. & D.*, February 28, p. 205).

The first list has been confined to chemicals and does not include compounded products such as insecticides or pharmaceutical preparations, but further editions are foreshadowed.

The great detail in which the scheme is described in the booklet includes specification of typography on the specimen labels. The Association is to be commended on the concept and execution of the scheme.

CORRESPONDENCE

Letters when received must bear the name and address of the sender, not necessarily for publication. The Editor does not hold himself responsible for the views expressed.

PURCHASE TAX AND DISCOUNTS

SIR,—I feel that it is necessary to bring to the notice of chemists, and apparently manufacturers and wholesalers, the following facts:—Where a manufacturer or wholesaler allows, for example, 2½ per cent. discount on payments, this can be taken equally on the goods and on the purchase tax. Even if payment should be somewhat overdue and the discount cannot be taken from the goods, it can still be deducted from the purchase tax. This is a concession that has been allowed by the Customs and Excise, and I feel that it is not generally known.

13 LANGDON DRIVE, LONDON, N.W.9

H. JUDD

CHEMIST'S LINES

SIR,—Is it possible that retail chemists up and down the country could not care less what happens to their counter trade? Soon we shall be asked to explain the merits of a new indigestion tablet. Fair enough, that is our job in life, but what will happen when we have established the sale of this tablet? You remember what happened to other products of this company!

A little point which is not very well known is how the grocer obtains his supplies of those products. By combining stomach powder, toothpaste, headache powders, pills, shampoos, wave set and sundry other quick selling lines, which we have to buy in separate parcels, he can buy on very favourable terms. I have yet to see a representative offering me the same opportunity. Face the facts, certain manufacturers are making use of the retail pharmacist and offering the advantages to other trades, because they know the chemist will not retaliate. This is just one chance to stand on our feet. In this instance we cannot lose. Will the grocer expertly sell any medicine, let alone a new chemical product? If the chemist does not do it then it will take the sting out of any advertising campaign.

HOPEFUL, C.F.

VALE et AVE

*Gone are the ponies of yesterday,
The metropolitan roar;
Faded the gilt, the columned halls,
The Park Lane's restless doors.
The healing scars on London's face,
The lights of London's river,
Like the tracks of the Arab who steals away
Are wrapped in the Past for ever.*

*We'll meet, my friend, another day
By Cherwell's rippling tide,
To taste our intellectual meats
Mid the stones of Oxford's pride.
To the fabled city of cap and gown
Shall cleave one legend more,
When you and I have walked the Broad
In nineteen fifty-four.*

PETER COOPER.

Behind the newly-established London Company, G. D. Searle & Co., Ltd., lie the research, technical and manufacturing resources of

AN AMERICAN PIONEER OF ETHICAL SPECIALITIES

THE establishment of G. D. Searle & Co., Ltd., at 17 Manchester Street, London, W.1, marks an important step in the continued expansion of an American organisation that was established in 1888 in Omaha, Nebraska.

The early policies of G. D. Searle & Co. were prophetic of the course the company was to follow through all the succeeding years. From the beginning the organisation has manufactured only ethical pharmaceuticals; it has consistently pioneered in research on new specialities, and as new and improved research methods and manufacturing processes have developed, they have been promptly adopted.

Throughout the entire sixty-five years of its existence, three men have guided the company's course. Gideon Daniel Searle, the founder, was president of the company until 1917. In that year Claude Howard Searle, M.D., succeeded his father as president and remained the active head of the business until 1936, when he, in turn, was succeeded by his son, John G. Searle, the present president. For three generations there has been no deviation from the policies characterised by the slogans "Ethical pharmaceuticals since 1888" and "Research in the service of medicine." All three men have held the conviction that a pharmaceutical manufacturing firm deserves to prosper in proportion to its contribution to medical knowledge and science. That is why practically all current Searle products are original developments, created in the company's research laboratories, clinically tested under the company's direction, and marketed under registered trade names. The policy is further exemplified in the fact that a large proportion of the space of the present Searle laboratories is devoted to the discovery, development and perfection of new remedial agents.

The company's pharmaceutical plant is situated on a 30-acre tract a few miles north of the city of Chicago. The building illustrated was the first structure on the present site, which was occupied in 1942. In the past ten years it has been necessary to double the area

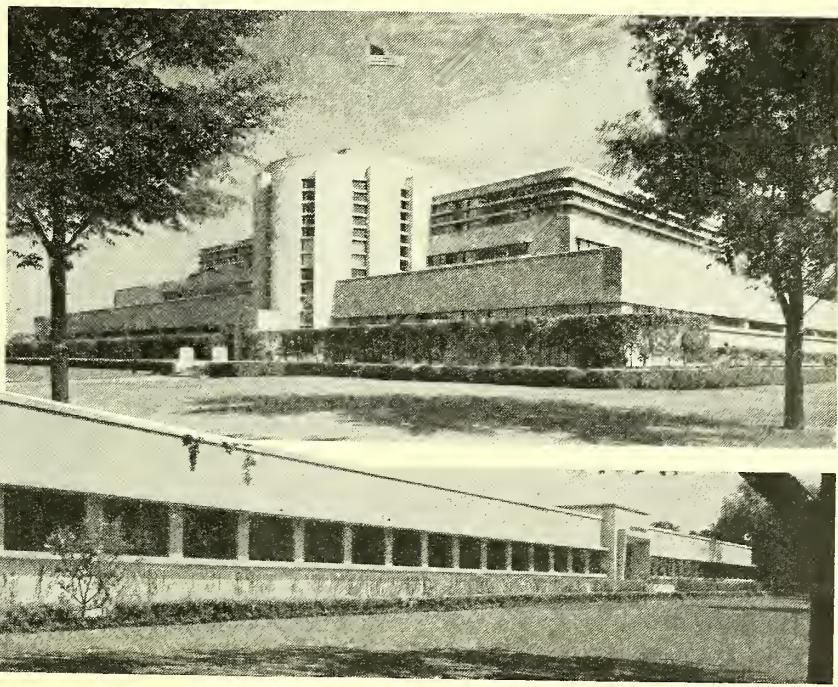
and triple the cu. ft. of space. That has been done by the addition of six more buildings. The main laboratory building is a three-story structure, plus basement. The building houses the administrative, analytical, ampoule, packaging and shipping departments. The basement, described as English-type, provides a cafeteria for use by the personnel and incorporates an auditorium.

A separate building is devoted to research in physiology, pharmacology, biochemistry and organic chemistry. By November 1, 1953, a second research building will be in operation, providing space for 100 more two-man laboratories. A "pharmaceutical building" houses the company's granulating, tabletting, coating and liquid departments. The power plant is a separate unit that provides a central source of heat and power for the seven modern buildings that make up the research and manufacturing laboratories.

G. D. Searle & Co., Ltd., will start by manufacturing four products. One of them, Diodoquin, achieved worldwide prominence during the 1939-45 war for its effectiveness in the treatment of amebiasis and amoebic dysentery. Another, Floraquin, combines the protozoacidal effect of Diodoquin with dextrose, lactose and boric acid to provide restorative treatment for all types of vaginitis. The third speciality to be manufactured in England—Dramamine—has probably the widest acceptance in the treatment of motion sickness (air, sea or rail), and many other types of nausea and vomiting. Another original preparation in the field of research is an anticholinergic drug, Pro-Banthine, used for the treatment of peptic ulcer and other parasympathetic conditions.

The background of family and integrity, and all of the research, technical and manufacturing resources of the American company, are an integral part of the English associate.

The frontage of the headquarters building thirty miles north of the city of Chicago, U.S.A., effectively expresses the company's watchword "Research in the service of medicine." The entrance, flanked by the dominant central feature (illustration at right) is flanked by clipped hedge and screen of trees. The aspect below indicates the vast size.



PROBLEMS OF PRACTICAL TRAINING

A quartet of papers presented at a Branch Representatives meeting held in London on September 3

FOR the half-yearly meeting of Branch Representatives held in connection with the British Pharmaceutical Conference the Council this year chose as subjects for discussion the practical training of entrants to the profession and whether Latin or English should be the language of pharmacopelial titles and of prescriptions. On the first subject four papers were presented dealing with the subject from the points of view, in turn, of a proprietor pharmacist, hospital pharmacist, manufacturing pharmacist and teacher of pharmacy. The first was on:—

RETAIL PRACTICE
By Fernley Wallis, M.P.S.

[ABSTRACT]

I MAINTAIN that students who intend taking up retail pharmacy as a career should, in addition to their academic training, have a sound training in business methods as well. The course of training for the Intermediate examination should be taken and the examination passed before apprenticeship. That favours the student's prospects in that the habit of study acquired at school remains unbroken. It leaves the way clear for the student to devote his whole time during apprenticeship to the acquirement and cultivation of a proper pharmaceutical background, which is a vital factor in the promulgation of his final-course studies. The next important stage involves the question whether a student should take a two-year apprenticeship before the Qualifying course at college, or proceed directly to college for the final course, after passing the Intermediate or gaining exemption therefrom, and should do the permitted twelve months after passing the final examination. Upon that question the following comments are offered. For students desirous of pursuing an academic or industrial career a case can perhaps be made out for the post-examination apprenticeship. For students intending to take up retail or hospital practice—surely the majority of pharmaceutical students in many provincial schools of pharmacy—the two-year apprenticeship before the two-year Qualifying course is to be regarded as an absolute necessity. Otherwise a student commencing a two-year course directly from the intermediate stage does so without any pharmaceutical background—a procedure greatly to be deplored, and soon involving the student in heavy weather, particularly

in the many aspects of pharmaceutics.

The incidental effects of the work and training of the pharmacist in the light of the much changed character of medical practice in recent years are reflected in the new curriculum and in the current dispensing routine of both shop and hospital. The value and importance of a sound apprenticeship is today as vital to the student as ever it was, despite the radically altered character of the preparations and substances handled in the day-to-day routine of the dispensary. As a corollary one must emphasise the equally important duty of the pharmacist to his apprentice, to see that he acquires the complete mastery of the fundamentals of the craft and a solid pharmaceutical foundation upon which he can build throughout his college course. That is a most responsible task, to be undertaken only by the really conscientious pharmaceutical proprietor, alive to the effects of such professional guidance in moulding the future career of his apprentice.

Difficulties for Students

A student proceeding direct to a final course without the intervening two-year apprenticeship can acquire the necessary proficiency in practical pharmaceutics only with considerable difficulty. The student with the sound two-year apprenticeship starts his final college course at a considerable advantage over the immature student without background and training in the principles of his future profession. The case for the apprenticeship before the final course is strengthened when one considers the subject of forensic pharmacy, about which an apprentice can gain much valuable knowledge and insight by virtue of his experience in a good pharmacy. That background of pharmacy law again proves invaluable to the student on taking up his college course in the subject, and the advantages become equally patent when considered along with the practical training in pharmacy—so much so that one wonders whether it would not be advisable to make it compulsory for a student intending to take up a retail, and perhaps even a hospital, career to do the two-year apprenticeship before qualification, leaving no option in the matter as at present. The difference between a student who has completed his apprenticeship before proceeding to the final

course and one who is leaving it until after passing the examination must surely be obvious to every reader of Pharmacy at an early stage in the student's academic career.

Problems for Apprentice Masters

Other difficulties may face a student leaving his apprenticeship until after passing the final examination. There is the question whether a retail pharmacist can regard it as satisfactory that the potential apprentice should regard himself as almost completely qualified, and a "cut above" an ordinary apprentice. The arrangement may work well in the case of a father and son both in pharmacy, where the son can arrange to carry out his twelve-month post-examination apprenticeship in the business under his father's supervision and training. The question of apprenticeship obviously devolves upon the right type of employer. Not only can students who have done an apprenticeship be distinguished from those who have not, but with the former it soon becomes apparent whether they have been with a conscientious employer or otherwise. The pharmacist who cannot spare the time to give his apprentice a sound basic training in the principles of his craft should on no account undertake that responsible and vital duty.

The turning-out of a well-trained apprentice today is as important and necessary to all concerned in the student's future career as at any time in the past. It is also a matter of great pride and distinction for the retail pharmacist who has gained a good name in that respect.

The second paper dealt with training in:—

HOSPITAL PRACTICE
By E. J. Fitchett, Ph.C.

[ABSTRACT]

FROM the hospital point of view three separate interests are involved in training: those of the pupil, the employing authority and the pharmacist. The prospective student is officially dissuaded—rightly, I believe—from regarding a pre-Intermediate apprenticeship as likely to prove of maximum benefit. His lack of essential basic know'dge at that stage makes as much difficulty for pupil as for apprentice-master. The weight of that responsibility for the apprentice-master should not be underestimated. A glance at the excellent



CONFERENCE BOWLS: The Scottish skip (Mr. W. Spence Culbert) in action. The match in progress. A little guidance from the man on the spot. England's skip (Mr. J. F. McNeal) puts a wood down.

notes produced for his assistance by the Council of the Pharmaceutical Society proves the point. The more conscientious may be deterred from taking pupils and only those who feel that they owe it to their profession will make the effort needed. The days when pupils were regarded as a source of cheap labour are happily over.

As to the employing authority, the outlook of boards of governors and management committees is not necessarily the same. Boards of governors, being attached to teaching hospitals, are perhaps more ready to help the pharmacist who feels it incumbent on himself to take pupils whatever stage their training has reached. Hospital management committees rightly ask what benefit is likely to accrue to patient and hospital through taking pupils, and whether better value for money could be obtained by employing some other grade of person. The stimulus of having a pupil in the department is of undoubted value to the pharmacist, acting as a continual refresher course. It would be of positive value, too, if the undoubted shortage of pharmacists in hospitals was lessened as a result of their return after qualification.

I believe the two-year post-intermediate to be preferable to the one-year post-graduate apprenticeship, but the margin is narrow and the size of hospital may be the deciding factor. The two-year pre-graduate pupil, provided he has had a good and conscientious apprentice-master, should make a better practical pharmacist, and I believe is preferred in the college and university to the pupil who has probably come straight from school. The strain for him of the course for the Qualifying examinations is considerably eased, provided training is well planned and carried out. To the pharmacist who has the legal responsibility for the work of the department, it is easier to supervise the work of a pre-graduate

pupil. He is being cast in the mould of the department and not having to be adapted to its needs.

It is possible, in the larger departments, to arrange an overlap if more than one pupil is taken, and that helps in smoother running. Such departments frequently have sub-departments in which case the student's time can be divided between dispensing for inpatients and out-patients, preparing sterile products, and manufacturing. With the aid of textbooks and books of reference suggested in the Society's notes already referred to, a set of pharmacognosy specimens, the time and the inclination, it is possible to give the student a good professional foundation.

Problem of Forensic Pharmacy

Remembering that the majority of the members of the profession practise in retail pharmacy, one small problem is forensic pharmacy. I believe that is considered a subject difficult to teach and easier to learn in practice. It is even more difficult to teach rules applicable to retail practice while operating modified rules in hospital where no sales are made. The value to the student of the post-graduate year depends largely on his attitude of mind and adaptability. He has passed his examinations, and he has preconceived ideas, but is not yet running his own show and is not yet responsible in law. At the end of a year he has to be replaced and if, as I have suggested, his time is divided between dispensing, manufacturing galenicals and making sterile preparations, the department is disturbed every few months while the new person settles down to the routine. Perhaps the best type of hospital for him is the larger teaching hospital (where a larger staff can absorb those frequent changes) or a small hospital with one pharmacist. It has been suggested that all pharmacists should serve a year in hospital. Medical men, before being allowed to practise, have to spend a year in one of certain selected hospitals. A case could be made up for a similar arrangement with pharmacists.

For a number of years students of the Leicester School of Pharmacy have spent several periods during their final

course in the manufacturing laboratory and sterile preparations unit of the Leicester Royal Infirmary, making, under supervision, preparations that will be used on patients and not consigned to college drains. The experience is believed valuable for the student, and might be worth trying in other teaching establishments. Any means to bring together teaching departments and the profession in practice should, I think, be encouraged. To sum up, the hospital is, in my opinion, probably the most suitable place for professional practical training. I prefer to have pre-graduate pupils for two years, though the majority of students prefer a one-year post-graduate apprenticeship. In fact, the only two-year candidates in the future may well be those for whom there are no places in the final courses in the colleges. That state of affairs may not be a bad trend. Many tasks formerly carried out by the pharmacist can well be carried out under supervision by technicians, and the pharmacist left to utilise the increased knowledge which rising academic standards bring.

The third paper dealt with the problem:—

FROM THE MANUFACTURERS' POINT OF VIEW

By E. K. Samways, B.Sc., B.Pharm., Ph.C., F.R.I.C.

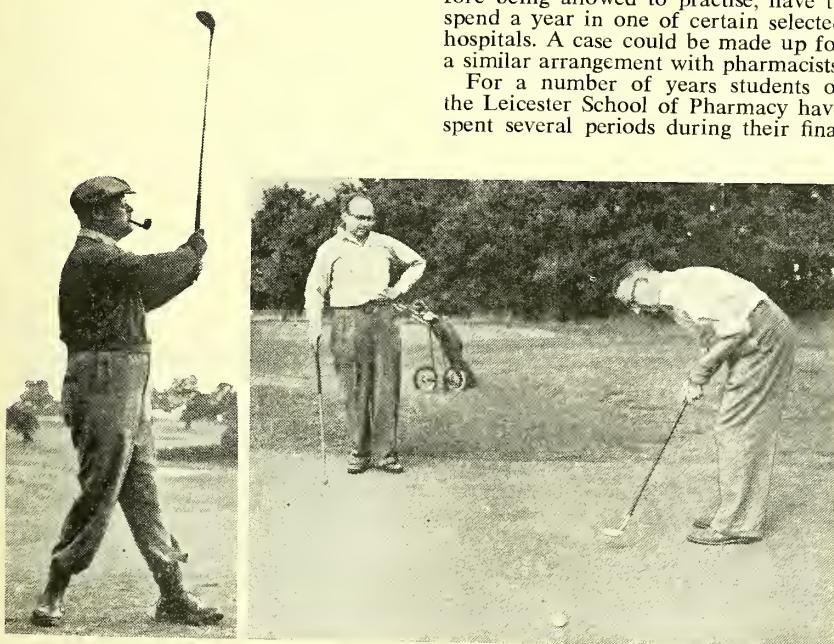
[ABSTRACT]

THE manufacturer has to distinguish sharply between the young person applying for training or apprenticeship prior to qualifying or graduating and the trainee who has his academic work behind him. The one is usually young in years, malleable but not very responsible; even if he is a conscientious lad no manufacturer would lay on his shoulders other than a very light burden of responsibility. That is not to say one would not encourage him to take a responsible view on the problems he was set. The graduate trainee, on the other hand, is an adult—in the strict legal sense perhaps not a fit person to handle poisons, but possessed both of technical knowledge and the adult outlook, and hence can have laid on him certain responsibilities which the pre-graduate trainee or apprentice could not be called upon to accept.

All would want to give "good" practical training. What are its features? I would list:—

- (1) Leading the trainee into the habit of unbiased and careful thought on all problems.
- (2) Accuracy and cleanliness.
- (3) Building up a relationship founded on a two-way loyalty.
- (4) Seeing that, however imaginative his head may be, his feet stay firmly on the ground.
- (5) Relating theory and practice, and showing their interdependence.
- (6) Handing him, or allowing him to develop and acquire, what the Americans call "know how."

The graduate trainee is all too rarely cost-conscious. One of my problems in his practical training is to try to get over to him a sense of value, while avoiding with care the impression that nothing else matters. I sense that both



Left: Dr. H. Davis at the top of his form? Right: Mr. A. W. Bull watches a putt at Moor Park.

in England and the United States the Schools of Technology get the commercial aspect over better than the Universities. Industry is based on a carefully adjusted balance in which economics plays a vital part, a fact understood much better by most workmen than by most graduates.

Some people see a problem in the matter of payment. I do not. While the trainee is absorbing knowledge and gaining experience he should not, if properly supervised, be able to cause great damage or waste, and he is therefore worth at least the rate of pay for a workman of his age. With his University background, his ability perhaps to lead, his quicker appreciation of points of technique, the graduate trainee is probably worth a bit more. If he is underpaid, he will feel that he is in a race apart—he should be paid as if his knowledge is valued and not as though his lack of experience were sneered at.

An industrial concern does for the individual some things which, if he is to be well trained, he should be able — and wishful — to do for himself. Every pharmacist worthy of the name has an inherent care, bred in his bones, on all matters concerned with weighing, measuring and dosage. He is always alive to the chance of a mistake. In industry, house rules born of experience protect the employer from many of the risks of human error. Checking systems may bring about in the pupil a frame of mind that is the negation of continuous alertness.

In industry the senior man responsible for the training is likely to contribute less in the way of personal practical tuition than would be the case in hospital, retail, or teaching practice. That does not matter so long as he supplies explanation and historical information where it is needed, gives his reasons for deviation from theory, and shows interest in his pupil's progress. In industry work is departmentalised. To get a training in all branches the pupil must serve with different co-workers and under different masters. There is a need for the person responsible for training to keep in touch with the pupil throughout, and so provide continuity of broad supervision and encouragement.

Trial and Error Ruled Out

Any manufacturer who subscribes to the view that his pupil should be allowed to make mistakes to gain experience must give him a bench and some bench apparatus, or may give him a run in the development section before putting him on the manufacturing floor. However, no training is complete unless the teacher points out the pitfalls and explains the means which experience has taught for their avoidance. In short, the pupil should be taught from the mistakes of others without having to make them all again for himself. How should the time be divided?

For the pre-graduate pupil some guide can be obtained from the experience of the schools of pharmacy; the Society's pamphlet provides good guidance, too. The post-graduate pupil should also have some practical work in every field available in the business, but I

feel that it is legitimate to allow him to spend a disproportionate amount of time in the section of his choosing. It seems unnecessary to provide an extensive course in the manufacture of sterile products for a graduate pupil who has decided to specialise as, say, an analyst. On the other hand, an increasing number of graduates seek to gain admission to the Society's register via a period of practical training which could quite conceivably be taken entirely in a single department, even, say, something as specialised as the sterile dressings department, of a manufacturing house. That may be a bad thing, as it could lead to the occasional production of registered pharmacists with an insufficiently broad background. I understand that the point has not escaped the attention of the Society's Council.

Gaps in Training

Mention of specialisation raises a training problem the manufacturer may have to face. A few manufacturers supply the whole trade with such things as volatile oils, alkaloids and resins, while others provide, let us say, the range of sulphonamides or anaesthetics. That creates a corresponding gap in the range of products made by the general drug house and leaves some weak spots where training must be skimped. I don't think the manufacturer need feel too bad about it for, if he cannot be a jack-of-all-the-trades that comprise pharmacy, he is master of at least as many as his fellows in the other branches of the craft.

The trainee in industry must learn to mix happily with others less fortunate than himself in education, though greatly his senior in years and in specialised techniques. I consider that the old attitude of "You must forget all that college stuff, by lad, and learn how the job is really done" is a bad one. On the other hand, some graduates need tactfully to be shown not only that they must not throw their weight about but also that maybe they haven't quite as much weight as they think. However, time spent on learning about human relations is never wasted.

The fourth and final paper dealt with the subject:—

FROM THE TEACHING STANDPOINT

By Professor H. Brindle

[ABSTRACT]

I HAVE been invited to deal with practical training from the academic standpoint. The terms of reference appear limited, for as the period of practical training is two years if taken before the academic training and one year if taken afterwards, there is an enormous difference between the type of training advisable under those two possibilities. It may also be taken under a pharmacist in a retail pharmacy, a manufacturing laboratory, or a hospital. The pupil may be a one-year post-graduate student who has completed the whole of his academic course, or a two-year pre-graduate student who may not have passed his Intermediate examination. The apprentice may know a good deal of the practice of pharmacy from the

academic side, or just a little of the underlying pure science, or little or nothing of either. I invite you, when you have some hours to spare, to work out the permutations and combinations of those possibilities.

Is it Necessary?

I would first ask: is practical training as we understand it necessary or advisable at all? From the teaching standpoint I can say that it is not. I am not prepared to say that it is even advisable. But from the standpoint of producing a complete competent pharmacist I believe it is so advisable as to be necessary. A second question is whether practical training should be undertaken before or after the academic training. The Council made a great mistake when it reversed its wise decision of a few years ago not to allow apprenticeship or practical training to be taken before the entrant had passed the Intermediate examination or its equivalent. I think I know the arguments in favour of allowing a boy or girl to commence the practical training after having passed the General Certificate of Education in five subjects at the ordinary level. Whatever reasons were put forward I claim that, in these days of free higher education for nearly everybody who can profit by it, it is almost equivalent to kidnapping or exploitation of child labour to take such an apprentice: there is considerable danger of the apprentice proving incapable of progressing further with his studies. The Government has instituted an examination, the G.C.E. at advanced level, almost specifically for the purpose of proving whether the student has the mental capacity for entry to a profession or a University. What can we say of a body that refuses to profit by it and goes out of its way to accept what is really the lowest school-leaving certificate? The minimum standard for entry to pharmacy is now no higher than it was fifty years ago.

A stronger case could be made out for practical training after having passed in chemistry, physics and biology at the G.C.E. advanced level, or the Pharmaceutical Society's Intermediate standard, but before taking the course for a final examination. The student has at least a knowledge of the basic underlying science, and he has proved that he has in all probability the mental capacity to succeed in his more advanced studies. I am often asked whether it is advisable to under-



Mr. J. A. Brown, Belfast; Mr. J. P. Kissane, Tipperary; Mr. H. Burlinson, Manchester; and Mrs. Kissane, photographed at Moor Park on Conference sports day.

take practical training before or after the course for the final examination. My answer always is that, unless there are special circumstances, the best plan is to complete the academic course and then undertake the one year's practical training.

I will briefly give some of my reasons for advising that course. The essential difference between professional men and technicians or artisans is that the members of a profession have been trained to understand the principles underlying the things which they do, i.e., their professional work. The technicians or artisans may do similar work but may know nothing of the underlying principles. All our educational effort, regulations and examination syllabuses are really designed to lay the foundations for the production of professional men. I could say much about the function of our Universities and Technical Colleges as regards general education, but I must confine myself for the purpose of this morning's meeting to the technological aspects of our training. We devise full-time courses and examinations to cover the theoretical and practical aspects of pharmacy, appoint teachers, and provide apparatus to give the necessary training in well-equipped schools. Why then do we allow amateur teachers with equipment which, by comparison, is inadequate, to try to teach such things as the following (the wording is taken verbatim from the "Rules for Courses of Practical Training")?—

- (a) Manipulation of pharmaceutical apparatus in common use.
- (b) Recognition by sensory characters of the chief crude drugs and chemical substances used in medicine.
- (c) The preparation of galenicals.
- (d) Dispensing of prescriptions.

I contend that these cover about 80 per cent. of the work indicated in the rules. The time a pharmacist occupies in teaching them is so much waste, both for him and the apprentice. All are done so much better in the school course. With the best will in the world it is impossible to teach the underlying principles of those operations in a shop, and I doubt if it can be done in a hospital or manufacturing laboratory. Unless the underlying principles are thoroughly taught, we are starting off our young pupils with the artisan or lower-grade-of-technician type of training.

The only logical way is first for the student to learn all he can of the principles underlying pharmaceutical operations, and then to apply those prin-

ciples to his practical work, much of which can be done in the schools but some of which must be learnt under actual practising conditions in the pharmacy, hospital or manufacturing laboratory.

In Other Professions

The nearest professions to pharmacy are medicine and dentistry. We should think the medical profession had gone mad if it allowed doctors to take apprentices straight from school, yet we allow it. The medical profession recognises the value of a system of practical training by making one year's practical training in approved hospitals compulsory, but of course the training is taken *after* the academic course.

I refuse to discuss the acceptance of an apprentice before he has passed the Intermediate examination. It is a practice that is wholly bad for everybody concerned — the apprentice, the individual pharmacist, and pharmacy in general. I can see some advantages to some pharmacists in taking apprentices before those apprentices have taken their final course. The pharmacist catches his apprentice young and finds him more amenable and less critical of the work he may be asked to do. I fear there are still a number who tend to regard the apprentice as a source of cheap labour; that class of pharmacist would complain bitterly if all practical training were of the post-academic type. I have tried to show that the conscientious pharmacist wastes much time in trying to train pre-graduate apprentices whether in hospital, shop or manufacturing laboratory. That unfortunately means that a greater proportion of the apprentices who come to the pharmacy schools for their final course have not received a satisfactory training in pharmaceutical operations — even such as one might expect from a good apprenticeship.

We make no distinction [at Manchester] between students who have had the two-year practical training and those who have not, though the former are at least two years older. After a week or two the two categories are usually indistinguishable so far as their work is concerned. A few who have served an apprenticeship excel, particularly in practical pharmaceuticals, but only a few. On the other hand, some have learnt bad habits, produce slipshod work, and are behind the others, having much to unlearn and sometimes never managing it. In short, from the teacher's standpoint, it makes no real difference in the pharmacy school whether the practical training has been taken or not. It is time we ceased to delude ourselves and sometimes others with the idea that anybody benefits from attempts on the part of the Society to enforce the rules for the course of practical training so far as pharmaceutical operations are concerned or attempts on the part of the pharmacist to carry them out.

I believe a course of practical training to be so advisable as to be almost necessary. I believe practical training useful because by it the trainee becomes familiar with pharmacy as it is actually practised and gets his sense of proportion suitably balanced. He learns, for example, that the barbitur-

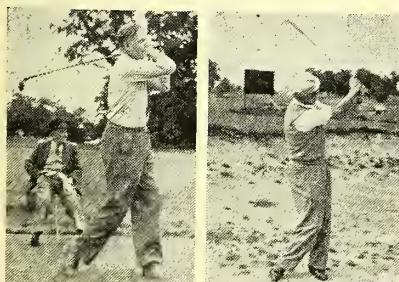
ates are of much more practical importance than the organic arsenicals; and that if he is to make a livelihood he cannot spend days assaying tincture of opium or carrying out penicillin sensitivity tests. He should learn about the economics of running a pharmacy or dispensary. He comes into close contact with the British public and should learn to be practical, tactful and gentlemanly in his dealings with its members. We can't teach those things in school. He should learn the correct relationship of pharmacy to medicine and *vice versa* and translate his knowledge into action in his contacts with members of the medical profession. Incidentally, how much better does he learn those things if he has already spent two or three years in close contact with fellow students who are to become lawyers, architects, teachers, scientists, civil servants, dentists and probably most important of all, doctors. In later years Jack Jones, M.D., consultant, may have a better opinion of pharmacy and pharmacists in general for that contact. If the trainee has already taken his final course he brings with him to the pharmacy or the hospital that confidence which a feeling of sound and accurate knowledge imparts.

The atmosphere a pupil assimilates during his practical training is intangible but real. In absorbing it and being absorbed by it he becomes a pharmacist — provided he has completed his academic training! Otherwise, I claim he is too raw and inexperienced really to assimilate it. He should also become expert in certain operations by repetitive work which he cannot carry out in the pharmacy school, but it must be by the professional route, following the academic course, and not by the low-grade technician's "rule of thumb" method.

Good for the Pharmacist

Methods of storage of drugs and the layout of a pharmacy or dispensary are best learnt in practice. I should like to put forward another argument in favour of post-academic practical training. It is good for the pharmacist in practice to have contact and to work with students who have recently completed their academic course. Sometimes they bring a fresh outlook into his life and sometimes perhaps a little new knowledge. The experienced pharmacist has much he can pass on to the student but he himself should benefit from the association.

It is argued by many teachers that all these things are picked up during the first few years' experience as a pharmacist in any case, and therefore that the period of practical training could be eliminated. It is important that the student should be made to feel that he is still a pupil for at least one year after he has passed his Qualifying examination. He must sense that it is still his duty to apply himself to learning and acquiring the attributes and experience which I have just mentioned, and that it is somebody's job to help him in acquiring them. Hence I come down definitely on the side of continuance of a period of compulsory practical training — after the completion of the full academic course.



DRIVING OFF: Mr. R. L. Hanbury, London.
Mr. A. G. Anderson, Northern Rhodesia.

Discussion

In throwing the meeting open to discussion the chairman (MR. T. HESELTINE) said the Council had invited overseas Conference visitors to attend the meeting and he hoped they would feel free to enter into the discussion.

MR. H. S. GRAINGER, West Metropolitan, was the first to go to the microphone. He deprecated any differentiation at too early a stage. Mr. Grainger thought the principle of a post-graduate apprenticeship was not wrong, but its practice was haphazard. The Society had the nominal responsibility of supervising the trainee in his pre-registration year, and should at least impose some kind of test at the end of the period, which should be longer than at present. The Society, the Ministry of Health and the teachers should work out a system for the post-graduate period to be taken under the aegis of the colleges.

MISS A. T. BORROWMAN, South-west Metropolitan, read a letter giving the views of Sir Harry Jephcott on the subject. She said that she herself had employed "one of the first B.Pharms." On that experience she had never employed another. All the same, she thought post-graduate apprenticeship could be made to work given an intelligent graduate with more thought of service to the community and less of having a good time. She would like to see costing and accountancy in the syllabus.

MR. G. T. M. DAVID, Swansea, agreed that the trend was away from craft and towards profession but said that those of his colleagues with experience of post-graduate apprentices were inclined to share Miss Borrowman's reaction. The solution suggested by his branch was a two-year apprenticeship, one year to be taken before and one after graduation.

MR. K. HOLLAND, Romford, made the point that in other professions with a statutory period of practical training economic conditions dictated a further period before the fledgling became free to practise entirely on his own. That was not so in pharmacy. The pre-academic apprenticeship was not good, he thought, for a profession, but the single year before registration was not enough. The period should be two years.

In the view of MR. E. R. MATTHEWS, Portsmouth, the object of practical training was to make prepared, particularly for handling hazardous materials. The training should be broadened accordingly.

MR. T. W. FISHER, Leeds, said that the Leeds Branch had been interested in pharmaceutical training for a long time. It was closely in touch with students at Leeds University and Leeds and Bradford technical colleges, which between them catered for all means of entry into pharmacy. Two Branch members were examiners and four were on the advisory committee to the pharmacy section, Leeds technical college. They had come that day to ask for an alteration of the means of entry whereby a student can go right through from school without any knowledge of what a working pharmacy looks like until he takes his registration year.

"Thirteen months ago my Branch held an open meeting to which students and anyone engaged in their training were invited. As a result of that meeting a resolution on the subject of the post-graduate registration course was sent to Council. It asked that some modification should be made so that the qualification examination should be taken in two parts, the so-called purely technical subjects of pharmacognosy, physiology, pharmacology and pharmaceutical chemistry at the end of the two-year course, and the pharmaceuticals and forensic pharmacy at the end of the one year's practical training, the effect being to keep the student in that status. We were asked to withdraw that resolution on the assurance that the Council was in fact working on some such modification. That was the last we have heard of the matter. We feel that the points raised are even more valid today, when we have had a chance to meet more of the students entering by this method, for these reasons:—

Hard Going

Students who have gone straight through from school have told us that they found it much harder going than did the people who had served a two-year apprenticeship. They estimate that the lack of practical knowledge of common terms used in general practical pharmacy put them back a term. A lecturer assured us that it made the work of himself and his staff twice as hard when trying to instil into these students the atmosphere of pharmacy that would enable them to understand terms and processes better."

Members of the Branch who had taken on post-graduate students were very uneasy about the situation. They were slow off the mark, and under the impression that five items to a dispensing card before lunch and five before tea was the average pace in a working dispensary. It took far too great a part of their registration year for them to work up any steam pressure. Their dispensing was done without any sense of urgency. Never having had working contact with patients, they found it hard to realise that sense. Routine duties were resented as something that they ought not to be called upon to do, and great show had been made in one or two cases over a refusal to do normal dusting. Small use to know all about aseptic technique when the background is grey with dust! They showed some resistance to being taught—and with some justification. They had been up to London or Edinburgh, had passed an examination of some severity, and felt that in all but name they were qualified pharmacists. The registration year was to them an uncomfortable and unnecessary formality.

The chief defect that was noticed, however, was a lack of knowledge of human contacts, and a consequent lack of sympathy with the people whom they served. We believe that the student who serves his apprenticeship before qualifying gets that by precept and example, and the student who takes it later is at a great disadvantage without the experience. The student doctor meets the people he serves at an early stage in his training, and

attends clinics, visits wards to take case histories and talk to suitable patients, and later acts as a dresser, under the Ward Sister's supervision.

The post-graduate-trained pharmacy student lacks any parallel experience, which he would get in a retail pharmacy, and is the poorer graduate thereby. He has yet to develop a sense of service, which is a hard thing to do when one considers oneself to be fully qualified in all but name.

It was suggested some time ago that a non-technical subject should be introduced into the final examination. That has the germ of an idea, but why choose elementary philosophy or the like? Over 80 per cent. of the students who qualify enter retail practice, and it is our belief that, in spite of attempts to steer it in other directions, retail practice is here to stay for a long time yet. It will take a wise man indeed to show us the line where professional and business interests divide, so why not introduce training in methods of retail practice, with the object of raising the whole standard of retail pharmacy to the level of its technical training? Why not teach stock, expense and staff controls, ethical behaviour, ethical display, and the meaning of service?

In summary, the following suggestions were put forward on behalf of Leeds Branch on future training in pharmacy.

1. Abolish entry in pharmacy by means of the post-graduate one-year practical training.

2. Put into the syllabus training in the non-technical aspects of pharmacy, which will assist in the practical observation of many of the points of the revised code of ethics, with emphasis on the need for good service.

Retail Requirements Paramount

A strong advocate of pre-graduate apprenticeship was MR. WATERMAN, Hounslow, who placed importance on the contacts it gave with the public.

MR. A. JACKSON, Leeds, said that educational standards in pharmacy were being raised in conformity with the advance of medicine, but the degree standard was in conflict with the requirements of retail pharmacy. Those requirements were paramount, and the Council should reconsider its policy accordingly.

MR. T. A. REES, Cheltenham, knew of no other profession with two (in fact three) methods of qualifying. He was convinced that the best apprenticeship would be one year before and one year after graduation.

Another representative who argued that it was all wrong for the apprenticeship to be two years before or one year after graduation was MR. F. HEPBURN, Edinburgh. Two years' training was just as necessary to the graduate. The transition from practice to theory under the old system had not been difficult. The reverse was most difficult.

If it were true that the time of taking an apprenticeship made no difference in teaching the student, then the decision when to take it should be left to members in general, said MR. PEEL, Huddersfield, while MR. MYERS, Bradford, said there was a case

for testing the aptitude of intending entrants before they embarked on their training.

MR. R. RIGBY, North Staffs, held that retailers should decide on the period of training and that they should not listen too much to the teachers. He would like to see the General Certificate of Education, Advanced Level, the necessary admission.

MISS J. HINCKS, Slough, made mention of a method by which in her branch area unsuitable candidates were filtered out before going too far. The branch was in touch with the heads of local schools, and the children were encouraged to visit pharmacies to find out what sort of career pharmacy offered. She advocated an apprenticeship divided between more than one type of premises.

One Year "Not Enough"

MR. A. G. SHAW, Thames Valley, was among those who thought one year not enough. He had been surprised to learn from one student that no dispensing was done during the final year at college, and thought practical training time should be made available at college. If it were not possible to extend the pre-registration period to two years, then in hospitals apprentices should be regarded as supernumeraries by the Pharmaceutical Society and the Ministry of Health.

MR. C. W. ROBINSON, Liverpool, said that graduates who went as apprentices into manufacture regarded their year before registration as a necessary evil. That was entirely the wrong attitude. Was it true that the colleges could do nothing to inculcate a sense of responsibility? He thought more could be done.

A call for facts on which to make a decision was made by MR. W. O. AYERS, Nottingham, and MR. R. FLETCHER, Derby, drew attention to the difficulties of pharmaceutical (one-year) intermediate students in schools where they were in a minority among other (two-year) science students.

MR. H. HUMPHREYS JONES, Liverpool, maintained that the apprenticeship should be for two years before, and not for one year after the Qualifying examination. Post-graduate apprentices had not the right attitude to the public. They could only acquire that during the formative period.

Before the principal speakers replied to the points raised, MR. A. T. SISSONS, Victoria, Australia, speaking by invitation of the president, described the parallel problems of Australia, and how they were being dealt with.

Five of the six States, he said, preferred to modify the apprenticeship system rather than abandon it. The aim was to bring the pharmaceutical student with his customers (for in Victoria, for example, more than 95 per cent. of pharmacists were in retail business). It was hoped to make the academic course one of two years' duration and to provide for two periods of forty weeks each of practical training, taken in pharmacies but under the jurisdiction and supervision of the educational authority. In Australia, the student was not allowed to regard himself as a graduate at any point short of registration. At least four Australian

States included business principles among the subjects in the pharmacy course. Training in manufacturing houses was not recognised. Pharmacists would welcome English titles. Originally Latin had been used in order to convey, not to conceal, ideas. Today, to wish to retain Latin titles was obscurantism.

In his reply, MR. FERNLEY WALLIS said he agreed entirely with Mr. Grainer that there should be no distinction among pharmacists at the graduation level. To prevent "misfits," the chemists of Plymouth laid themselves open to give any necessary advice to entrants. In addition to pharmacy there were surgical matters that the student should learn.

MR. FITCHETT said that the training should be directed towards producing good practising pharmacists. He thought the schools had a good system of selecting students.

MR. SAMWAYS said there seemed no objection—rather the reverse—to some sort of test at the end of the pre-registration period.

PROFESSOR BRINDLE said the discussion had shown that there was much to be said on both sides.

The second subject for discussion at the Branch Representatives' meeting—introduced this time by two speakers representing opposite viewpoints—was the use of Latin in pharmacopelial titles and in prescriptions. The first paper was:—

THE FUTURE OF LATIN IN PHARMACY

By Donald W. Hudson, M.P.S.

[ABSTRACT]

We have reached a stage at which the influence of at least two other professions is forcing upon us a fundamental change in the traditional practice of pharmacy which has stood for upwards of five hundred years—the use of Latin as the accepted language in which the prescription is written or the formula expressed.

Whilst few pharmacists would wish to hamper the proper progress of science or seek to influence the training or practice of any other profession, there are many who regard the removal of Latin from the medical curriculum not as a sign of progress but as a step in the reverse direction. They are deeply concerned at the serious repercussions upon the practice of pharmacy which this decision must have. It would appear that the medical profession is by no means unanimous in approving the change and that only a limited section welcomes it. Medical practitioners are not involved in any practical problem arising out of the change; pharmacists are. If Latin disappears from future medical practice how soon will it be before it ceases to be taught in our own schools? As and when that occurs practical problems will arise daily.

Should there be Resistance?

Members of the Society should, therefore, carefully consider the merits and demerits of each side, and decide if, or to what extent, the change should be resisted.

For the past few years a knowledge of Latin has not been compulsory to the medical student. Nor is the Latin terminology of drugs taught to them at the present time. The post-war edition of the United States Pharmacopœia abandoned Latin in titles, subtitles, formulas and text. The Pharmacopœia Commission set up in 1948 followed that example, with the result that the 1953 British Pharmacopœia appeared for the first time with English titles. The British Pharmaceutical Codex Committee has traditionally followed the Pharmacopœia Commission. Whilst the 1949 edition of the Codex employed English sectional headings it retained Latin for monograph and formula titles. I think it may be safely assumed that the next edition will be in English only. At the time of the compilation of the first National Formulary in 1949 the effect of the change had not been felt, and little pressure was exerted to make any change to the traditional use of Latin headings, Latin titles and English formula.

Compromise

By 1952, however, the effect of the change was apparent, and a compromise was made between the two schools of thought resulting in the introduction of English headings in the second edition. It is still too early to make any forecast how the problem will be resolved in the third. There are two aspects from which the future of Latin in pharmacy should be studied: the utilitarian or professional and what might be called the cultural. The advantages of Latin from the utilitarian point of view are, I think, self-evident. Latin as a language is precise in its terms and being a dead language is not subject to change. English, on the other hand is frequently capable of more than one meaning, has changed almost out of recognition in the past few centuries. In certain overseas countries where English is nationally spoken an entirely different meaning is attributed to certain English words in everyday use in this country at the present time.

The cultural advantages may not be so obvious at first sight but they are just as real and probably more important. All the learned professions are the outcome of Greek and Roman culture, and to reject Latin is to cut oneself off from the main stream of development and to deny the tradition in which we were brought up. Latin with its ordered syntax and grammar provides an excellent mental discipline, requiring meticulous attention to detail, the ideal training for a pharmacist. It enables him to understand much of the basis of his own and other Western European languages.

The practical problems being brought about by the change are now becoming obvious, and there is a growing volume of opinion amongst pharmacists in general practice that the alteration from Latin to English for section headings and titles in official and semi-official text and reference books has already caused confusion, difficulty, delay and possibly error in dispensing practice. It is now possible to foresee some, if not all the

implications of the change in the wider international field. Such advantages as might be gained in overcoming the difficulty of translating into Latin such titles as "Whole Human Blood," "Dried Human Plasma" and "Liquid Human Serum" does not warrant the reversal of a policy which has previously had, with few exceptions, an international background. The disadvantages from the pharmaceutical aspect should be given serious consideration from the following aspects:—(1) The apprentice or student. (2) Teaching. (3) Retail practice. (4) Manufacturing and distribution. (5) Reference. (6) International, and last but by no means least, (7) The attitude of the patient.

Double Burden

For many years to come it will be necessary for the apprentice or student to learn more thoroughly than ever before both the English and Latin terminology in addition to contractions in both languages. Prescriptions recorded in prescription books up to the present time are in Latin. It must not be assumed that they are of historical interest only and that there is no longer a necessity to dispense prescriptions recorded years ago. From the teaching aspect Latin will remain necessary because the recently trained pharmacist must be able to interpret and dispense not only the prescription written in English, but also the older prescription or record written in Latin. If he is not so trained he is incompetent to undertake the work which can normally be expected to occur in the average dispensing establishment.

In many pharmacies stock containers are constantly in use bearing the traditional Latin names. If these are not understood with absolute precision by all persons making use of them error will undoubtedly result. Many of the remarks applicable to retail practice will have their counterpart in manufacturing and the wholesale and distributive trade.

The alteration of sectional headings and the arrangement of the various formulas under them in the 1952 National Formulary has not escaped criticism from pharmacist and medical practitioner. Retail pharmacists in all parts of the country complain of the waste of time it has involved in the busy dispensary. The scope of the change is much wider in its application and will be much more serious in its effect. Reference to the National Formulary, the formulary section of the Codex and other books, to the Drug Tariff, to manufacturers' and wholesalers' lists will be further complicated, in addition to the difficulty that must arise when back reference to the earlier formularies, codices and manuscript records become involved.

From the international aspect the change is an extremely retrograde step. The ideal of establishing an International Pharmacopoeia in everyday use in all countries throughout the world will be retarded by the absence of any international background of nomenclature. At the present time it is possible to decipher a prescription written in almost any country, pro-

vided it is clearly written, whilst the printed drug label can be translated with relative ease. To the pharmacist with no background of Latin that would be impossible.

Apart from the fact that the use of Latin can frequently conceal from the patient the nature of the treatment which is being prescribed, few doctors and chemists have not encountered the patient who develops a psychological idiosyncrasy to a drug as soon as he knows what it is. An additional danger every pharmacist experiences is the patient or the nurse who imagines that he or she can correctly read the prescription and not infrequently wishes to dictate it to the dispenser over the telephone. With a prescription written in English that assumption of knowledge might well lead to disastrous results.

We should resist any attempt to abolish Latin from either the training or the practice of pharmacy, and in all our publications should continue to compromise in the future as we have done in the past. Every effort should be made to secure international agreement on the nomenclature of drugs, and the earliest opportunity should be sought to give an international name or cipher to such emergency requirements as grouped whole human blood and human blood derivatives.

The second paper was an advocacy of:—

NATURAL ENGLISH EXPRESSION

By Professor A. D. Macdonald,

University of Manchester

(A member of the Pharmaceutical Society's Council)

[ABSTRACT]

PHARMACY has been called the hand-maid of medicine—perhaps we should call it here the *ancillary* science—but it seems to me that the question of Latin as the best medium for prescription-writing is a problem more medical than pharmaceutical. We are—pharmacists and doctors alike—mostly conservative about our professions. We dislike disturbances of our routine and oppose changes unless we are convinced that they are necessary for our best work. Is the Latin prescription necessary? Is the Latin prescription good? As usual, opinions vary, as on alcohol, and almost as extremely. The truth is likely to lie between extremes.

When Harvey wrote *De motu cordis*, Latin was still largely the language of science as of church and state—every educated person knew and used Latin. But that was three centuries ago. Nearly a century ago the first British Pharmacopoeia was written in English, though Latin titles were retained and have long been taken to denote a medicinal substance. We have learned—some of us—official contractions for those Latin titles. Some of us contract the official contractions—I have had to express my own intense dislike of "pil. nit." for pilocarpine nitrate, even where the context indicated pretty clearly what was meant. But Latin, though still a major subject in most school curricula, has lost its universality. I do believe in the educational discipline of learning

Latin, but except for the very few it never becomes, as French or German may, a language in which we think or dream. When we write a prescription in Latin, therefore, we are either translating into Latin, or remembering and regurgitating. Either process introduces a fresh possibility of error. We try to teach medical students to write prescriptions with the same meticulous care they would use in writing a cheque—but in writing a cheque we do not translate into Latin. Yet a mistake in the prescription might be infinitely more serious.

Titlers Lose Heart

The B.P.C., 1949, gave English titles to its nine monographs on preparations of human blood, and refused to latinise cat-gut. That lead on blood was followed by the B.P. Addendum, 1951. In the same B.P.C. the coiners of Latin titles, after achieving for tulle gras "Curatio Carbasi Paraffini" lost heart a little, for the fifteen standard dressings that follow are, like Hymns A. & M., numbered "Curatio Normalis I-XV"! I wonder if any prescriber has ever used those numbers, or called a plaster "ligamentum calcii sulphatis"?

Truth to tell, prescriptions have never—well, hardly ever—been written in real Latin. There is nothing international about some B.P. and B.P.C. titles, as can be seen when we compare ours with those of other die-hard, Latin-retaining countries, or even with I.P. We have developed a jargon and a system of contractions or shorthand based on Latin, and that is all. We naturally resent giving up our system and learning another. But if for all students of medicine, dentistry and pharmacy of the near future that represents a substantial saving, a saving of time and a saving of effort, surely it is worth while. We must remember that in most universities Latin is no longer a compulsory subject for matriculation, is no longer even a faculty requirement at a level considerably below matriculation, as it used to be. The newly qualified doctor or dentist cannot be assumed to have a working knowledge of Latin—if asked to write an uncontracted prescription he might make Cicero turn in his grave or bring Caesar back as a great avenger: but probably he would not try unless it were something he had memorised! But apart from the limited knowledge of the prescriber, prescription Latin is cruelty to Latin—the clumsiness; the improvisations, occasionally amusing but usually oh so ponderous; the hybrids or worse; the contractions which in many cases might equally well be contracted English.

It has been argued that this ersatz Latin constitutes a code between doctor and pharmacist which conceals the nature of the therapy from the patient who should not know the ingredients of his medicine. But does any such code exist? Think of the drugs for which some code might be desired. Is opium concealed in tinct. opii, or cocaine in cocaine? Did we not abandon any pretence at secrecy when we changed the name of Dover's famous powder from pulv. ipecac. co. to pulv. ipecac. et opii? Are we ashamed of

the therapy we prescribe or dispense? Are we prepared, in this golden age of therapeutics in which we live, to stoop to secret nostra or other mumbo-jumbo? I hope not.

Are the supporters of official Latin not trying to lock up their house after it has been burgled and stripped? The B.P. which became law on September 1 gave English titles pride of place. We are promised, in the B.P.C. of 1954, that this good work, which was so wisely initiated in 1949, will be continued and expanded to all monographs. Must we not just accept the

transition period as in some ways awkward and inconvenient—we know that it will take a little time to familiarise ourselves with change? If the change be inevitable as well as eventually beneficial, surely we have the courage to make it now rather than postpone it on the theory that then someone else will have to cope.

MR. H. JARVIS GRAVES, Exeter, said he was wholly on Mr. Hudson's side. With prescriptions in English there would be even more people who thought they could dispense, or tell the pharmacist what to dispense.

MR. H. W. TOMSKI, Harrow, said that the tradition of writing prescriptions in Latin had something to do with the Continental practice of putting the prescription on the label of the bottle.

MR. H. S. GRAINGER said that most hospital pharmacists would welcome the English titles. Latin had originally been used to convey, and should not be used to conceal ideas.

MISS A. T. BORROWMAN, S.W. London, asked whether it was fair to students to take up time for Latin in an overcrowded syllabus.

A Chartered Accountant gives answers to ANY BUSINESS QUESTIONS?

We have obtained a lease of premises for conversion to a retail pharmacy. There has been some delay and we shall not be able to open as soon as we had hoped. So far we are without any demand for rent—when does liability for it arise?

THE commencement of liability for rent is entirely a matter of agreement. If there is not already some provision covering an interim period in which to get the premises ready, the landlords may be prepared in the circumstances to make such an allowance.

It should be noted that the rent for the period prior to the opening of the business is not a deduction in arriving at the income-tax profit. Such a payment is taken as strictly in the nature of capital expenditure in getting the premises ready for the business.

Our immediate landlords are now in liquidation, and we are concerned as to the effect of the liquidation on our tenancy agreement with them. Is there a danger of termination of such agreement?

A LIQUIDATOR of a company incorporated under the Companies Acts may apply to the court for sanction to disclaim property, or any interest therein, burdened with onerous covenants. Written notice of disclaimer must be given within twelve months of commencement of the winding-up or of first becoming aware of the property (longer if the court permits). Any party interested in the disclaimed property, or under a liability in respect of it, may apply to the court for a vesting order on terms the court regards as just. A written application may be served on the liquidator calling on him to decide within twenty-eight days whether he will disclaim or not.

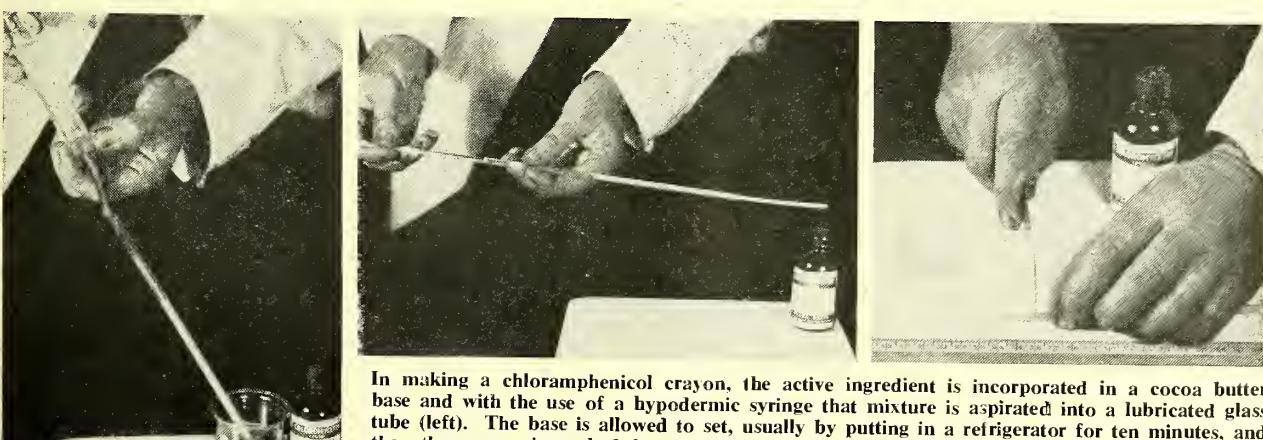
I have come across ordinary and preference shares but what exactly are preferred ordinary shares?

DIFFERENT classes of shares are issued to give variations of rights consonant with an investor's needs. Ordinary shares are entitled to the surplus profits available (out of which a dividend is declared) after any other interests having prior rights have been satisfied. They are sometimes subdivided into preferred and deferred ordinary shares. The former carry a preferential right to a fixed rate of dividend but must be distinguished from preference shares which rank first usually both as to payment of dividend and return of capital. There is no right to accumulate arrears of dividend on preferred ordinary shares. Deferred shares are entitled, subject to other rights, to the remaining surplus.

We feel that drawing from the till for petty cash is not satisfactory, and would like to institute a better system. Your recommendation would be welcome.

It is preferable to put aside an appropriate round sum for petty-cash disbursements and record the items in a petty-cash book. The book may be ruled so that each transaction is analysed to facilitate the grouping of expenditure. The balance should be verified from time to time with the actual cash in hand and further sums drawn from the bank to meet anticipated needs. The imprest system may be operated. An adequate sum is drawn for petty cash and periodically a cheque is drawn from the bank in reimbursement of the total spent, so restoring the original imprest or floating balance. At any moment then, the cash in hand, together with expenditure since it was last made up, should equal the imprest.

Secundum Artem— MAKING A CHLORAMPHENICOL CRAYON



In making a chloramphenicol crayon, the active ingredient is incorporated in a cocoa butter base and with the use of a hypodermic syringe that mixture is aspirated into a lubricated glass tube (left). The base is allowed to set, usually by putting in a refrigerator for ten minutes, and then the crayon is pushed from the glass tube with a glass rod of the same diameter as the crayon (centre). The crayon is then measured and is divided into appropriate lengths so that each section will contain the prescribed dose of chloramphenicol.

TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into stock. Crude drugs and essential oils vary greatly in quality and higher prices are charged for selected qualities.

LONDON, SEPTEMBER 16: Trading in PHARMACEUTICAL and FINE CHEMICALS is gradually improving both on home and export accounts. The improving trend, however, leaves no room for complacency amongst British manufacturers who fully realise the powerful competition that must be met from Continental countries in world markets. There were no price changes in that section during the week but in the industrial field a number of PHTHALATE plasticisers were reduced.

The HONEY market is quiet and apparently waiting to see what effect the end of sugar rationing will have on demand. Whilst the value of Jamaican honey is unchanged, that of Australian has fallen. In the CRUDE DRUGS market, during the past week ERGOT was quoted 1s. per lb. lower for shipment. IPECACUANHA continued firm with very few offers from origin and spot supplies virtually exhausted. The values of most SPICES were unchanged on the week's trading. PEPPER, however, provided a feature, for after a sharp decline in the early part of the week prices recovered to the previous week's level. Among the AROMATIC SEEDS business in Moroccan CORIANDER was done for shipment at 47s. 6d. per cwt., c.i.f., London. Indian DILL became somewhat firmer at 87s. 6d. per cwt. Considerable trade was done in STYRAX; further supplies are near at hand and the value is expected to remain unaltered.

The SAFFRON crop is reported to be a failure because of a drought in the growing areas. COCHINEAL provides a firm market also, with the black-brilliant quoted at 9s. 3d. per lb. Supplies of silver-grey cochineal on the spot are difficult to locate—so too is Jamaican SARSAPARILLA. PAPAIN values were unchanged but all grades of SHELLAC rose by 20s. per cwt. Shipments of SENNA from Tucuicorin during August are given below. The quality of the material was stated to be better than in previous months.

	United Kingdom	United States	Europe
LEAVES	Bales 91	Bales 400	Bales 389
PODS ...	134	—	134

The market for MERCURY appears fluid for the time being with no important sales taking place. The Spanish Government's mercury monopoly has said that it is ready to consider all offers from whatever source and for any quantity in the light of current market conditions and would shade their price if necessary. Official Spanish export prices of mercury have remained at \$190 (£69 approximately) per flask, f.o.b., despite cheaper Italian offers and Indian unloadings in the past. Italy has offered the metal in London at £63 15s., c.i.f. (equivalent to £64 15s. ex-warehouse) but no important quantities have been sold at this price so far.

In the ESSENTIAL OILS market PATCHOULI remains firm at origin because of American interest. Madagascar CLOVE LEAF is dearer by 1s. per lb. and LEMONGRASS by one penny.

ANISE for shipment was fractionally firmer during the week. SPEARMINT is easier as larger supplies are expected to be available from a greatly increased acreage of crops this year. The reverse position is said to apply to Italian PEPPERMINT although prices have remained steady. Other oils that were quoted lower included white CAMPHOR, French LAVENDER, and CASSIA.

UNITED STATES DRUG AND CHEMICAL REPORT

NEW YORK, SEPTEMBER 15: The GLYCERIN market continues about unchanged, with demand for refined glycerin at fairly good levels. Demand for ALCOHOL is also good. Synthetic MENTHOL is lower at \$5.39 a lb. (down 30 cents) for 100 lb. lots, while demand for natural menthol remains sluggish. Tinnevelly SENNA LEAVES are lower, with number one at 18 cents a lb. (down two cents); number two at 15 cents (two cents); number three at 11 cents (one cent); and PODS at 20 cents (three cents). Also lower is GUM ACACIA, amber sorts, at 13½ cents (down a quarter of a cent). Higher a lb. is PERU BALSAM at \$1.20 (five cents).

Lower a lb. among ESSENTIAL OILS are SPEARMINT at \$6.10 (down 90 cents); CLOVE LEAF at \$1.40 (15 cents); PIMENTO LEAF, \$2.35 (15 cents); VETIVER Bourbon, \$16.75 (75 cents); and Turkish GERANIUM, \$5.55 (20 cents).

Pharmaceutical Chemicals

ACETANILIDE.—1-cwt. lots are now 2s. 9d. per lb. for crystals and 5-cwt., 2s. 8d. Powder is 1s. per lb. more.

AMIDOPYRIN.—In 1-cwt. lots the price is 29s. per lb.

AMPHETAMINE.—BASE is 160s. per kilo. and SULPHATE, 140s. *d*-AMPHETAMINE SULPHATE is from 660s. per kilo. METHYLAMPHETAMINE HYDROCHLORIDE, 2s. 3d. per gm. for 100-gm. lots.

AMYLOBARBITONE.—B.P.C. is 65s. per lb. for 1-cwt. lots and SODIUM, B.P.C., 70s. per lb.

BABBITONE.—Rates per lb. for 1-cwt. lots is 24s. The SODIUM derivative is 1s. per lb. more than the base.

BARIUM SULPHATE.—1-cwt. lots of B.P. (x-ray) are 1s. 5d. per lb. and 5-cwt., 1s. 4d. per lb.

BENZOCAINE.—B.P. in 1-cwt. lots is about 22s. 6d. per lb.

BISMUTH SALTS.—The following are the prices (per lb.) in largest bulk packages:

	1-cwt.	28-lb.	7-lb.
	s. d.	s. d.	s. d.
CARBONATE ..	23 5	23 8	27 5
SALICYLATE ..	22 6	22 9	26 4
SUBGALLATE ..	21 8	21 11	25 4
SUBNITRATE ..	20 11	21 2	24 6

2-cwt. lots are 3d. per lb. less than the 1-cwt. rates. The present 1-cwt. rates for other salts are:—CITRATES, B.P.C., 22s. 8d.;

NITRATE, crystal, 14s. 8d.; OXIDE, B.P.C., 27s. 7d.; OXYCHLORIDE, B.P., 27s. 9d.; OXYIODOGALLATE, B.P.C., 28s. 9d. and TRIBROMPHENATE, B.P.C., 26s. 9d.

CALCIUM CARBONATE.—B.P. powder is £24 10s. per ton, ex store.

ETHER.—Prices (per lb.) in Winchesters are now as follows:—TECHNICAL, B.S.S., and SOLVENT, 5-cwt., 2s. 3d.; 10-cwt., 2s. 2d. ANÆSTHETIC, B.P., 5-cwt., 3s. 8d.; 10-cwt., 3s. 7d. In drums prices are 2d. per lb. less than above.

FORMALDEHYDE.—B.P. solution is 34s. per cwt.

GALLIC ACID.—B.P.C. is 8s. 1d. per lb. for 1-cwt. lots.

HOMATROPINE HYDROCHLORIDE and HYDROBROMIDE.—In 1-lb. lots the price is 67s. 6d. per oz.; METHYLBROMIDE, 82s. 6d.

LACTATES.—CALCIUM, B.P., is 2s. 7d. per lb. in 5-cwt. lots; 1-cwt., 2s. 8d.; 28-lb., 2s. 11d.; 7-lb., 3s. 3d. per lb. CALCIUM SODIUM, for same quantities, 4s. 4d.; 4s. 5d.; 4s. 8d.; and 5s. per lb.

POTASSIUM ACETATE.—B.P. is 2s. 8d. per lb. in 1-cwt. lots.

QUINIDINE.—Prices (per oz.) for minimum 100-oz. lots in the home market are: ALKALOID, 8s. 9d.; SULPHATE, 6s. 7d. Extra charges for small lots.

RESORCINOL.—1-cwt. lots are now quoted at 13s. per lb. by manufacturer.

SULPHOCARBOLATES.—SODIUM PHENOLSULPHONATE, B.P.C. (powder) is 7s. 4d. per lb. in 1-cwt. lots and ZINC, B.P.C., 7s.

SULPHUR.—B.P. PRECIPITATED is £105 per ton, or £10 per ton for 1-cwt. lots.

TANNIC ACID.—Home-trade rates for levis B.P. is from 5s. per lb.

THYMOL.—Prices (per lb.) are 16s. 9d. for 28-lb. and 16s. 3d. for 1-cwt. lots.

TRIETHANOLAMINE.—Commercial grade is about 2s. 8d. per lb. for drum lots, ex warehouse.

ZINC SULPHATE.—B.P. in 1-cwt. lots is quoted at 1s. 2d. per lb.; 28-lb., 1s. 5d.

Solvents

ACETALDEHYDE.—The 100 per cent. is 145s. per cwt. for drum lots.

ACETATES.—Prices (per cwt.), for drum lots are as follows:—AMYL (technical), 240s. and (B.S. 552; 1950), 242s.; BUTYL (B.S. 551; 1950), 186s.; ETHYL (B.S. 553; 1950), 156s.

ACETONE.—Drum lots are from £108 per ton for technical quality.

AMYL ALCOHOL.—Technical grade is £237 per ton.

BENZENE.—Thiophene-free is 8s. 11d. per gall. in 50-gall. barrels. Technical is 5s. 7d. per gall.

BUTYL ALCOHOL (B.S. 508; 1950).—1 ton lots are quoted at £163 10s. per ton and drums at £166 10s. per ton.

CARBON TETRACHLORIDE, B.P.—1-2 carboy lots are £120 per ton. TECHNICAL, in 40-gall. drums, in less than 1-ton lots, is £76 per ton; 1 ton and under 2 tons, £74 10s.; 2 tons and under 4 tons, £74; 4 tons and upwards, £73.

DIMETHYL ACETAL.—Drum lots are quoted at 163s. per cwt.

ISOPROPYL ALCOHOL.—Standard grade is £80 10s. per ton (5s. 7d. per gall.) in 10-ton lots. Essence grade is from 17s. to 19s. per gall., as to quantity.

PHTHALATES.—Lower. Prices (per lb.) for 10-ton lots are as follows:—DIAMYL, 3s.; DI-BUTYL, 2s. 1½d.; DI-SO-BUTYL, 1s. 11d.; DIETHYL (no. mal grade), 2s.; DIMETHYL, 1s. 8d.

Crude Drugs

ACONITE. — Spanish napellus is 3s. 2d. per lb., duty paid, ex wharf.

AGAR. — Kobé No. 1 on the spot is 19s. per lb.

ALOES. — Prime Cape on the spot is 165s. per cwt.; shipment, 156s., c.i.f.

ANTIMONY. — English, 99.6 per cent., £237 10s.; 99 per cent., £255 per ton.

ARECA NUTS. — Quotations are about 45s. per cwt. for Ceylon material. On the spot.

ASAFETIDA. — Persian block is £15 per cwt., duty paid.

BALSAMS. — Quotations (per lb.) are:—
Canada: New-crop, 22s. 6d., spot.
Copaiba: Soluble Para, spot, 12s. *Peru*, to arrive, 9s., in bond. *Tolu* (genuine as imported), 18s. 6d., spot.

CARDAMOMS. — Aleppy greens for September-October shipment are 8s. per lb., c.i.f., and 9s. 6d. for spot. No. 1 seeds are 14s. per lb., spot.

CASCARA SAGRADA. — New-crop offers for shipment at 235s. per cwt., c.i.f., for September shipment. Spot supplies are offered at 290s., duty paid.

CINNAMON. — Ceylon for shipment (c.i.f.), 0000, 2s. 6½d.; 000, 2s. 5½d.; 00, 2s. 4½d.; O, 2s. 2½d.; firsts, 2s. 0½d.; seconds, 1s. 11½d.; thirds, 1s. 10½d.; quillings, 1s. 4½d.; featherings, 10½d., chips, 5½d. per lb.

CLOVES. — Firm. Zanzibar on the spot are 8s. 6d. per lb.; September shipment, 5s. 3d., c.i.f.

COCHINEAL. — Black brilliant is 9s. 3d. and grey-black, 8s. 6d. per lb., on the spot.

HONEY. — Quiet. Australian, from 95s. to 105s., spot (90s. to 100s., forward); Argentine on the spot is 112s. to 120s.; Jamaican, unchanged at 120s. to 130s., ex warehouse terms.

HYDRASTIS. — Root is 22s. per lb., landed terms.

IPECACUANHA. — Very firm. Colombian is 43s. 6d. per lb., c.i.f. Matto Grosso, 45s., c.i.f., prompt shipment; and about 46s. to 49s. as to test for spot. Nicaraguan for shipment is from 48s. to 50s., c.i.f., as to shipment, whilst spot is nominal at 52s. 6d.

JALAP ROOT. — Vera Cruz is offering at from 3s. 2d. to 3s. 9d. per lb., according to test.

KARAYA. — No. 1 gum on the spot is unchanged at 200s. per cwt.; No. 2 is 140s.; No. 1, for shipment, 185s., c.i.f.

KOLA NUTS. — African halves are available on the spot at 4½d. per lb., 3½d., c.i.f., for shipment.

LIQUORICE. — Natural whole root, spot; Anatolian, 55s. per cwt.; Russian, 38s.; Syrian, 40s. to 42s. 6d. Block juice quotations are 195s. per cwt., delivered. Turkish stick is 240s. and Italian stick, 475s. per cwt., both duty paid.

MACE. — West Indian pale blade is 7s. 9d. per lb., for shipment, 6s. 11½d., c.i.f.

MASTIC. — Tears (f.a.q.) are 12s. 6d. per lb., on the spot.

MENTHOL. — Scarce on spot with Brazilian at 37s. per lb., and Chinese, 38s., both duty paid. Shipment (c.i.f.): Brazilian, 35s., Chinese, 30s.

MERCURY. — Nominal spot value is £70 per flask, ex warehouse.

MYRRH. — Aden selected sorts are quoted at £16 per cwt. on the spot. Siftings are from £7 10s. to £8 10s., and granulated, £13.

NUTMEGS. — West Indian 80's quoted at 2s. 9d. per lb. on the spot and 2s. 6d. c.i.f., for shipment.

ORRIS ROOT. — Offers of average quality Florentine are 160s. per cwt., nominal, ex-warehouse.

PAPAIN. — Unchanged. Spot values for East African grade one are 32s. 6d. per lb., and grade two, 30s. per lb.

PEPPER. — White Sarawak is 7s. 9d. per lb., spot, with 7s. to 7s. 3d., c.i.f., quoted for afloat. Black Malabar is quoted on spot at 97s. per cwt. Black Sarawak, spot, 7s. per lb.

QUILLAI. — Whole bark is £115 per ton, c.i.f.

RHUBARB. Chinese. — Spot offerings include: round Shensi at 12s. 3d. per lb.; rough round high dried, sound at from 6s. to 8s. 6d. and wormy from 3s. 6d. to 4s.

SARSAPARILLA. — Jamaican native red is scarce on the spot with a nominal value of 2s. 9d. per lb.

SEEDS. — **ANISE.** — Spot, Cyprian quoted at 140s. per cwt.; Turkish, 142s., duty paid, and 135s., in bond. **CARAWAY.** — Dutch are in poor demand, sellers quoting 82s. 6d. per cwt., duty paid, spot London. **CELERY.** — Indian is 1s. 11d. per lb., spot London. **CORIANDER.** — Market quiet with prices unchanged. Spot: Moroccan, 60s. per cwt., duty paid (55s. in bond); English, 70s. Moroccan for shipment, 47s. 6d., c.i.f. London. **CUMIN.** — Market dull. Spot: Cyprian, 135s. per cwt.; Maltese, 150s.; Moroccan, 145s., duty paid. **DILL.** — Indian on spot is firmer, 87s. 6d. per cwt. now quoted. **FENNEL.** — Indian is quiet with sellers asking 172s. 6d. per cwt., spot London. **FENUGREEK.** — Unchanged. Spot: Moroccan, 47s. 6d. per cwt., duty paid. **MUSTARD.** — English, 70s. to 85s. per cwt., according to quality.

Senna. — *Tinnevelly* LEAVES: number 1 on the spot, 11½d. per lb.; number 2, 10d., and number 3, 8d. PODS, f.a.q., are about 1s. per lb., on the spot and 9½d., c.i.f., September-October shipment. Hand-picked range from 1s. 8d. per lb. ex wharf. *Alexandrian* PODS, manufacturing, 1s. 8d. to 2s. 3d.; hand-picked, 3s. to 4s. 6d.

SERPENTARIA. — Root is offered at 40s. per lb. on the spot.

SELLAC. — Firm. Spot quotations are:— F.O.T.N., pure, 285s.; F.O. standard No. 1, 290s.; fine orange, 295s. to 320s. per cwt., ex-London warehouse.

SLIPPERY ELM BARK. — Selected slabs are 3s. 9d. per lb., and grinding quality, 3s. spot.

SQUILL. — Italian white on the spot is 60s. per cwt.

STRAMONIUM. — Indian LEAVES are 5½d. per lb., spot, and European, 97s. 6d. per cwt.

STYRAX. — Spot is 5s. 6d. per lb., duty paid.

TRAGACANTH. — No. 1 ribbon on the spot is £105 per cwt.; No. 2, £85; No. 3, £65.

TURMERIC. — Firm. Spot, Rajapore, 115s. per cwt.; Madras finger, 120s., nominal.

UVA URSI. — Spot offers are about 85s. per cwt.

VALERIAN. — Indian is 145s. per cwt. on the spot and 125s., c.i.f.

VANILLIN. — Rates (per lb.) are:— 5-cwt. lots, 30s.; 1-cwt., 30s. 3d.; 56-lb., 30s. 6d.; smaller quantities, 30s. 9d.

WAXES. — **BEES.** — Dar-es-Salaam spot, 430s. per cwt., September-October shipment, 395s., c.i.f.; Sudanese and Abyssinian, 365s., c.i.f., spot, 420s., duty paid; Benguela, 370s., c.i.f., and 425s., duty paid. **CANDELILLA.** — Spot is 635s. per cwt. **CARNAUBA.** — Prime yellow on the spot is 1,225s. per cwt.; shipment, 1,150s., c.i.f.; fatty grey is 930s. on the spot; shipment, 880s., c.i.f. **MONTAN.** — Rebeck crude on the spot is 125s. per cwt. **OURICURI.** — Spot 0.5 per cent. impurities, 715s. per cwt.—**SPERMACETI.** — Case lots are 1s. 9d. per lb. upwards as to quantity.

WITCH HAZEL. — Leaves on the spot are about 1s. 9d. per lb.

Essential and Expressed Oils

ANISE. — Spot supplies are offered at from 5s. 6d. per lb.; forward, 5s. 4d., c.i.f.

BERGAMOT. — Spot value is about 82s. per lb.

BOIS DE ROSE. — Brazilian on the spot is 31s. and 29s. 9d., c.i.f.

CAMPHOR, WHITE. — Chinese is 2s. 9d. per lb., on the spot.

CARAWAY. — English-distilled is offered at 45s.; imported oils are from 20s. per lb. for spot.

CARDAMOM. — Price per lb. is about 265s.

CASSIA. — Original drums are about 14s. per lb. for spot and 11s. 6d., c.i.f.

CASTOR. — In minimum 2-ton lots the price of pharmaceutical quality for prompt delivery is £186 per ton, naked, ex mill. Forward: October, £166; November-December, £156. **FIRSTS** are £6 per ton lower throughout.

CELERY. — British distilled is from 130s. per lb.

CHENOPODIUM. — 1-cwt. lots are 65s. per lb.

CINNAMON. — B.P. oil on the spot is quoted at from 60s. per lb. English bark oil is offered from 23s. per oz. Ceylon leaf is from 9s. per lb.

CLOVE. — English-distilled bud is about 70s. per lb. for 5-cwt. lots. Madagascar leaf is 10s. per lb., duty paid, and 9s. 3d. c.i.f., for shipment. B.P. is offered at 17s. 6d. per lb.

COD-LIVER. — B.P., is 10s. 6d. per gall. in charged returnable drums. Veterinary is from 9s. 6d. per gall.

CORIANDER. — Russian-seed oil is 150s. per lb.

CUBEB. — English-distilled and imported is offered at from 50s. to 55s. per lb.

CUMIN. — Quotations for English-distilled oil are about 75s. per lb. and imported 70s.

DILL. — B.P. English-distilled oil is quoted at 60s. per lb. Imported oils are offered at from 30s. to 40s. per lb., as to origin.

GARLIC. — English is from 55s. to 60s. per oz.

GERANIUM. — Bourbon on the spot is 80s. per lb. Shipment, 79s. 6d., c.i.f.

GINGER. — English-distilled oil is from 120s. per lb. Imported oils are available at from 80s. per lb.

HYDNOCARPUS. — Spot is offered at 2s. 2d. per lb.

JUNIPER BERRY. — Imported oils are offered at 17s. 6d. per lb., duty paid. English-distilled is offered at 75s. to 80s. per lb.

LAVANDIN. — Spot values vary between 15s. 6d. and 16s. 6d. per lb.

LAVENDER. — French, 40-42 per cent. linalol on the spot is about 41s. per lb.

LAVENDER SPIKE. — Spanish is about 11s. 6d. per lb.

LEMONGRASS. — East Indian is 6s. 9d. on the spot and 6s. 6d. per lb., c.i.f.

ORANGE. — Spot offers for sweet vary as to quality and quantity. West African is 11s. 10d. and Jamaican, 10s. 6d. per lb.

PATCHOULI. — Penang for shipment is now 52s. 6d. per lb. with spot offers advanced to 60s.

PEPPERMINT. — *Arvensis*: Chinese is about 24s. per lb. spot and 20s. 6d., c.i.f., September-October shipment; Japanese, 26s. spot and 25s., c.i.f.; Brazilian (50 per cent.), 15s. 6d. spot and 13s. 6d., c.i.f., for 40 per cent. (50 per cent. not offering). Italian "Mitcham" type oil is 49s. to 52s. 6d. per lb., as to quality; forward from 48s., c.i.f.

SPERMINT. — Offers of B.P.C. quality are from 60s. per lb.

ZANZIBAR CLOVE SUPPLIES

THE market review of the Clove Growers Association of Zanzibar which covers the final quarter of the 1952/53 seasonal year ended June 30 reports that the total crop of cloves for the year from Pemba and Zanzibar is estimated at 1,200,000 frasilas of 35 lb. For the three months under review supplies totalled 1,349,719 lb., of which Zanzibar contributed 834,260 lb.

The crop figures are compared with those of the previous season in the following table:—

Month	1952/53	1951/52
	lb.	lb.
July ...	447,460	627,377
August ...	623,630	671,827
September ...	501,622	728,939
October ...	229,875	956,299
October ...	500,000*	—
November ...	322,149	1,495,489
December ...	408,835	1,702,925
January ...	894,570	2,559,790
February ...	508,280	1,462,744
March ...	294,935	531,970
April ...	276,246	377,895
May ...	258,369	427,813
May ...	200,000*	—
June ...	196,604	213,405
June ...	418,500*	—
	6,081,075	11,756,473

*Cloves that did not pass through the Central Market, Zanzibar.

In the final quarter, Singapore was the chief buyer taking 35 per cent.

WORLD TRADE

Indian Penicillin Production. — A penicillin factory at Pimpri, in Bombay State, is expected to go into production by April 1954.

Pakistan Drug Imports. — Imports of drugs into Pakistan during 1953-54 will be maintained at last year's level, according to an announcement made recently by the Pakistan Health Minister. The Government have issued licences for the import of drugs worth 15,000,000 rupees for the six months ending December 1953.

Australian Imports. — Australia is to make a further relaxation of restrictions on imports from non-dollar countries on October 1. The easing will allow an increase in imports of about £45 millions for a year. Quotas for imports from the general group of countries (excluding dollar countries and Japan) will be increased by a further 10 per cent. of the base year. A number of items which includes medicinal preparations, will be put on a "no quota restriction" basis of licensing. They will be licensed without restriction on application to the Collector of Customs provided importers can show that the goods are available for importation within one year. The Prime Minister (Mr. R. G. Menzies) said recently the Australian Government appreciated that certain manufacturers were apprehensive about overseas competition. The Tariff Board would be able to deal expeditiously with applications for increased protection which under present conditions, would probably arise.

followed closely by India (34 per cent.). The United Kingdom purchased a little under 2 per cent.; the United States, 5 per cent., and Indonesia, 13 per cent.

The Association's selling prices per 100 lb. ex bulk, ex duty, to exporters only, usual contract, from July 1 were: Grade I, 250 shs.; grade II, 245 shs.; grade III, 240 shs. The selling prices are nominal only. Average prices for fair quality cloves in the open market during the year are compared with those of the previous season below:

Month	Average per 100 lb.	
	1952/53	1951/52
	Shs. Cts.	Shs. Cts.
July ...	675 03	320 60
August ...	721 04	357 40
September ...	817 98	329 92
October ...	829 47	333 18
November ...	878 62	385 01
December ...	729 94	386 30
January ...	862 76	447 59
February ...	868 78	533 93
March ...	788 45	519 18
April ...	806 96	544 88
May ...	836 19	614 95
June ...	689 55	695 30

Clove Stem Oil

Clove stem oil totalling 48,482 lb. was shipped during the quarter of which the United Kingdom received 41,132 lb. and the U.S. the balance.

TRADE MARKS

From the "Trade Marks Journal," September 9
For industrial, scientific, photographic, agricultural and horticultural chemicals (1)

EMPIPHOS, 719,075, by Marchon Products, Ltd., London, W.1.

For soap (3)

BREEZE, B717,598, by Crosfields (CWG), Ltd., London, E.C.4.

For pharmaceutical preparations (5)

PROPAK, 713,952, by Splendor, Ltd., Nottingham. ULTRAMIN 4, 716,311, by Bengue & Co., Ltd., Alperton. ANAHAEMINE, 719,477, by The British Drug Houses, Ltd., London, N.1. FELOPAN, 719,610, by Coates & Cooper, Ltd., West Drayton. OROSE, 719,711, by Optrex, Ltd., Greenford. NAGENTIS, 720,371, by Laboratoires Robert & Carriere, Paris.

For all goods, excluding veterinary preparations. (5)

MARINOL, 716,972, by Bayer Products, Ltd., London, W.C.2. MARINOL, 716,973, by Winthrop Products, Ltd., London, S.W.1.

For insecticides, germicides, bactericides and disinfectants (5)

MORTANE, 717,441, by Societe Anonyme Mortron Pour L'Europe, Bienna, Switzerland.

For medicated preparations for use in douching the nose (5)

NUSHE, B717,838, by Simons Cash Chemists, Liverpool.

For pharmaceutical preparations and anaesthetics (5)

XYLODASE, 718,212, by Duncan, Flockhart & Co., Ltd., Edinburgh.

For pharmaceutical, veterinary and sanitary substances, infants' and invalids' foods, medical and surgical plasters and disinfectants (5)

EMPIPHOS, 719,078, by Marchon Products, Ltd., London, W.1.

For insecticides and fungicides (5)

CUPRAVIT, 719,410, by Farbenfabriken Bayer Aktiengesellschaft, Leverkusen.

COMING EVENTS

Items for inclusion under this heading should be sent in time to reach the Editor not later than first post on Wednesday of the week of insertion.

Sunday, September 20

ROMFORD BRANCH, PHARMACEUTICAL SOCIETY, Orsett golf club, at 2 p.m. Jordan memorial trophy golf competition.

Monday, September 21

EAST METROPOLITAN BRANCH, PHARMACEUTICAL SOCIETY, Swan Hotel, Stratford Broadway, London, E.15, at 8 p.m. Lecture and demonstration on "Skin Care and the Art of Make-up" by a representative of Yardley & Co., Ltd.

ROMFORD BRANCH, PHARMACEUTICAL SOCIETY, Unicorn Hotel, Gidea Park, Romford, at 7.30 p.m. Mr. E. F. Hersant, B.Pharm., Ph.D., Ph.C., on "The Story of the Pharmacopeia."

Wednesday, September 23

BIRKENHEAD AND WIRRAL PHARMACISTS' ASSOCIATION, Prenton Hotel, Birkenhead, at 8 p.m. Mr. J. Stanton Campbell on "Verse and Worse."

SUNDERLAND BRANCH, PHARMACEUTICAL SOCIETY, visit to Abbott Laboratories, Ltd., Jarrow. Meet at Technical College, Sunderland, at 2.30 p.m., Fulwell Mill or South Shields Town Hall, Broughton Road, at 2.45 p.m. for transport.

READING BRANCH, PHARMACEUTICAL SOCIETY, Hawley Hotel, Blackwater, Surrey, at 7.30 p.m. Chairman's "At Home."

PRINT AND PUBLICITY

Price Lists

MOORE MEDICINAL PRODUCTS, LTD., 1 Queen's Terrace, Aberdeen, and 64 Gloucester Place, London, W.1: new illustrated price list.

UNICHEM, LTD., 3 Broadwater Road, London, S.W.17: Reference price list of ethical products, pp. 245, price 10s. net (interleaved copy, 22s. 6d.). The list is alphabetically arranged with brief clinical indications and therapeutic index.

Periodicals

THE M.O.R. GROUP OF COMPANIES, 48 Dover Street, London, W.1: "Oil," Vol. 2, No. 5, 1953, price 1s. Pp. 24.

Advertising Campaigns

BEECHAM (NORTHERN), LTD., St. Helens, Lancs: Nation-wide advertising for new formula Iron Jelloids will begin during the first week in October.

THE CROOKES LABORATORIES, LTD., Park Royal, London, N.W.10: Powerful campaign for Crookes halibut oil in national daily, weekly and magazine Press. Also twice-weekly programmes from Radio Luxembourg and colour "filmlets" in 1,000 cinemas covering all the country.

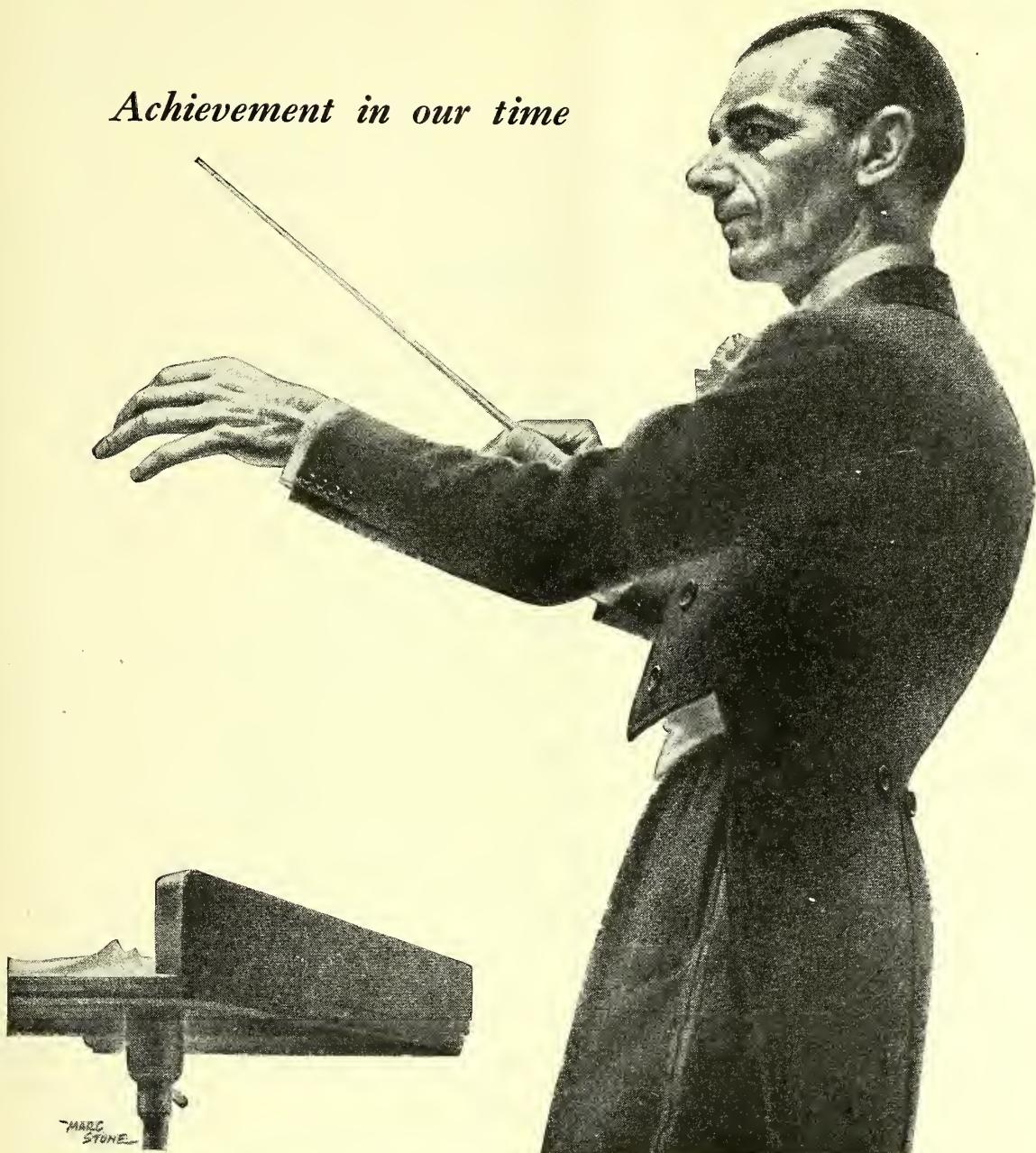
CUSSONS SONS & CO., LTD., 84 Brook Street, Grosvenor Square, London, W.1: Full-page full-colour advertisements for the company's products will be seen by 20 million Christmas shoppers it is claimed by the company.

KENWOOD LABORATORIES, LTD., 159 Finchley Road, London, N.W.3: Intensified advertising of Serocalcin during September-January in the national and provincial Press, national Sunday and London evening newspapers and in Scope.

KORAY, LTD., Bridgend, Glam: Full page advertisement in the Daily Herald, September 29 to open "biggest-ever" national advertising campaign for Koray, in the Daily Mirror, Daily Express, Daily Mail, Daily Herald and News Chronicle. Also in London advertising will be carried in the Star, on buses and on the Underground.

POTTER & CLARKE, LTD., River Road, Barking, Essex: In addition to large-scale national publicity, 1½-in. triple-column advertisements for Potter's catarrh pastilles and crystallised catarrh pastilles are appearing in twenty-four provincial newspapers.

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September 19, 1953

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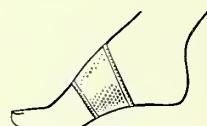
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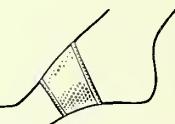
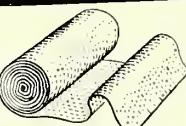
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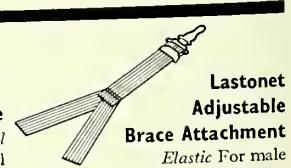


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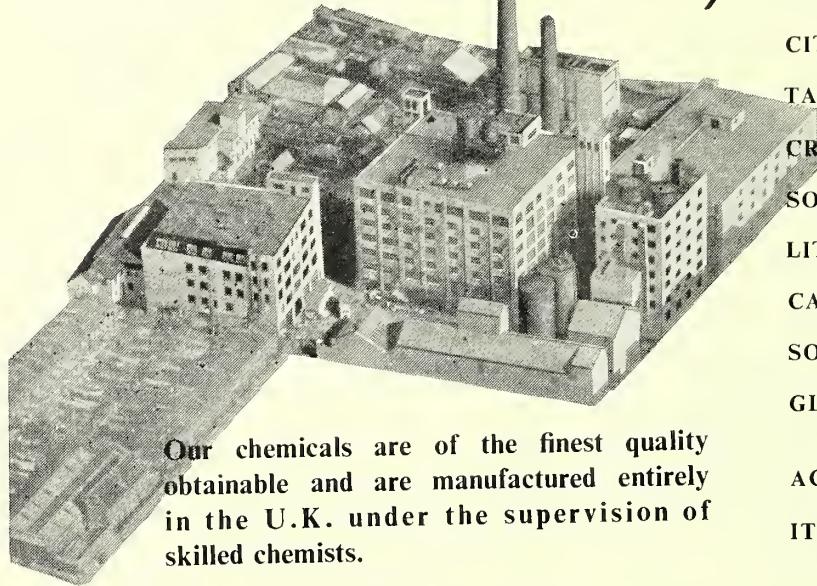
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Our chemicals are of the finest quality obtainable and are manufactured entirely in the U.K. under the supervision of skilled chemists.

CITRIC ACID

TARTARIC ACID

CREAM OF TARTAR

SODIUM POTASSIUM TARTRATE

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CALCIUM GLUCONATE

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GLUCONO DELTA LACTONE
(GLUCONIC ACID ANHYDRIDE)

ACID SODIUM CITRATE

ITACONIC ACID

KEMBALL, BISHOP & CO., LTD.

CROWN CHEMICAL WORKS

THREE MILL LANE · BROMLEY-BY-BOW · LONDON · E.3

ESTABLISHED 1870

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Distilled in Australia by the largest distillers and refiners of Eucalyptus Oils in the world.—**W. K. BURNSIDE, PTY., LTD., MELBOURNE, AUSTRALIA**

80/85% Rectified B.P.
Oil Euc. Dives 40/45%
Phellandrene

70/75% Rectified B.P.
Piperitone 90/95%
Oil Euc. Phellandra

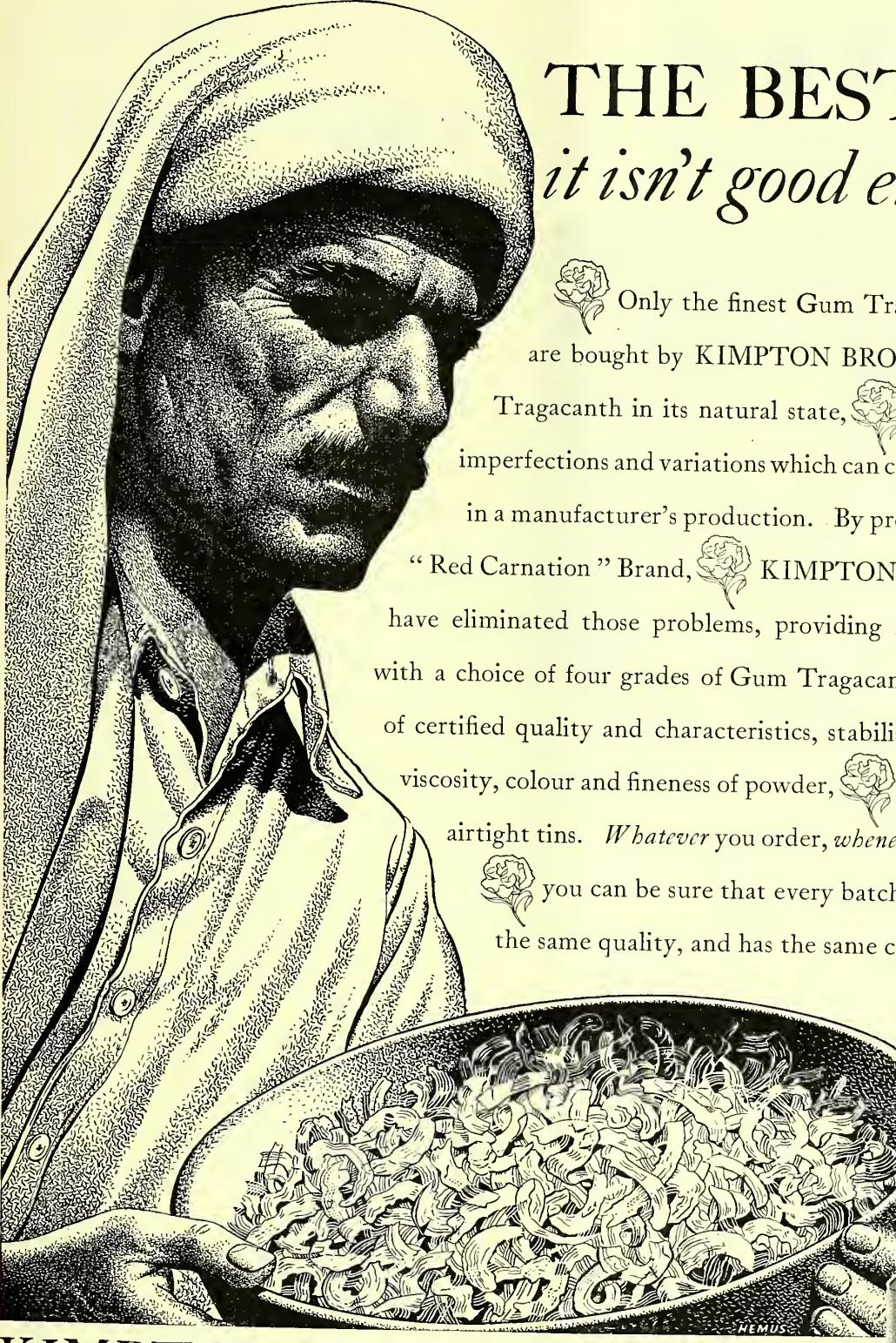
UNIFORMITY OF QUALITY · CONSISTENCY OF ODOUR

Agents for U.K.: **WILSON & MANSFIELD, LTD., 15 Philpot LANE, LONDON, E.C.3**
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TANNIC ACID

AND DERIVATIVES

THE BRITISH DYEWOOD COMPANY LIMITED
19 St. VINCENT PLACE GLASGOW, C.1



THE BEST—yet it isn't good enough

Only the finest Gum Tragacanth flakes are bought by KIMPTON BROS. LTD. Gum Tragacanth in its natural state, however, has imperfections and variations which can create problems in a manufacturer's production. By processing it into "Red Carnation" Brand, KIMPTON BROS. LTD. have eliminated those problems, providing manufacturers with a choice of four grades of Gum Tragacanth, each of certified quality and characteristics, stabilised as regards viscosity, colour and fineness of powder, and packed in airtight tins. Whatever you order, whenever you order, you can be sure that every batch you get is of the same quality, and has the same characteristics.

KIMPTON BROTHERS LTD.

Established in 1882

110 FENCHURCH STREET · LONDON, E.C.3. Telephone: Royal 5544 (5 lines)



PIFCO for PROFIT



Your regular Wholesaler can supply Pifco products.
If any difficulty in obtaining supplies, write direct.

PIFCO LTD., WATLING STREET, MANCHESTER 4

NATIONAL FORMULARY B.P. and B.P.C. **PASTILLES AND LOZENGES**

*are always available
in ample supply
from*

**ROBERT GIBSON
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MANCHESTER & LONDON

GIBSON'S SUPER QUALITY

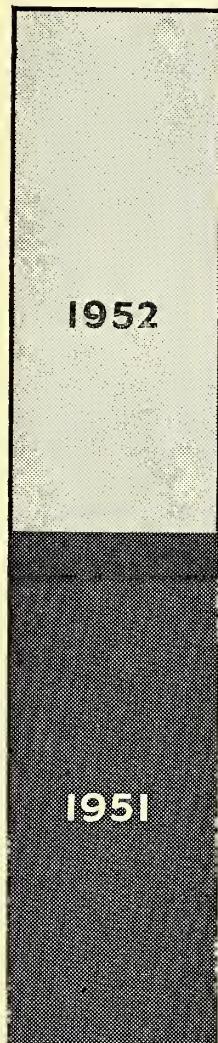
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GIBSON'S CHOCOLATE WORM CAKES
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CHLORO. PASTILLES
GIBSON'S SPECIAL CATARRH PASTILLES

The Silky Soft Absorbent
Tissue that is preferred



FREEDER BROTHERS PAPER MILLS
BRIMSDOWN, ENFIELD, MIDDLESEX
Telephone: Howard 1847 (3 lines) Telegrams: Sylkocrepe, Enfield, Middlesex

What is "National Advertising"?



Wisdom

A

B

C

D

Compare the weight of Wisdom's advertising support with that of four other leading brands. The light grey part of each column represents 1952—the dark grey indicates 1951.

THE words "national advertising" can be used to describe a 1-inch advertisement which appears once in a single periodical or newspaper—provided this circulates all over the country.

In fact (as you have probably noticed) this is roughly what is meant by quite a lot of firms who claim they support their products with "national advertising."

It is not, however, what Wisdom means by national advertising.

The sum Wisdom spends in advertising support to the retailer is published regularly, as in the case of every other toothbrush. The diagram above shows Wisdom's figures for 1951 and 1952 compared with those of other leading brands. When you look at these we think you will agree it is hardly surprising that Wisdom sells roughly twice as fast as the next most popular brand.

This year Wisdom advertising support is heavier than ever before.



Something they can trust

The public likes something reliable, something with dependable high quality. A faithful following is the public's response to trustworthy products that give real satisfaction. Such is the popularity of

CUTICURA SOAP CUTICURA OINTMENT CUTICURA TALCUM POWDER CUTICURA SHAVING STICK

There is a growing circle of discriminating people who appreciate high quality and insist on these soothing, protective, fragrant, mildly medicated Preparations, for care of the skin. Just display one each of these eye-catching firm family favourites in your attractive window, and make sure this steady all-the-year-round business comes your way.

CUTICURA SOAPS, OINTMENTS AND SHAVING STICKS HAVE ALWAYS CONTAINED CHLOROPHYLL

325

SURCO

SURGICAL ELASTIC HOSIERY

SEAMED, SEAMLESS TWO-WAY STRETCH ELASTIC NET

SURGICAL BELTS TRUSSES AND SUNDRIES

Over 60 years' service of everything surgical

SURGICAL HOSIERY CO., LTD.
Russell Street, NOTTINGHAM
Telephone No. 75903 Telegrams: Surgical Notts



AGARICUS ALBUS AMMI VISNAGA SOPHORA JAPONICA SOAPROOT

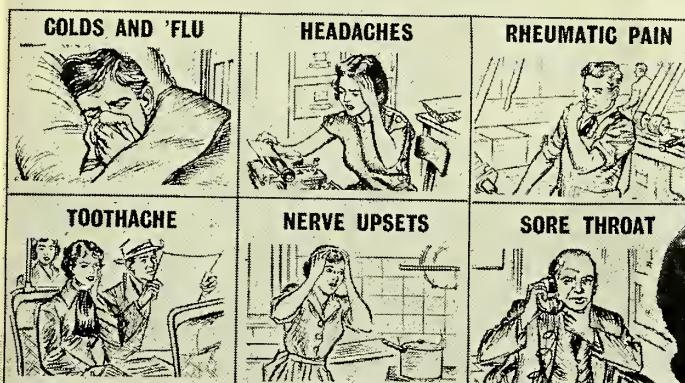
and all other Botanicals, Gums, Waxes, Essential Oils and Spices

JOHN KELLYS (LONDON) LTD.
24 OLD BROAD STREET, E.C.2

Telephone: LONDON Wall 4882, 6585 (3 lines)
Telegrams: "Ergotine, Stock, London"

NEW YORK · HAMBURG

If you feel you ought to take an aspirin tablet . . .



**take KORAY
and get better**

-quicker!

The greater pain-relieving, cold-smashin' of these little pink tablets has made the of people who, like you, those aches and pains, n' were n' has

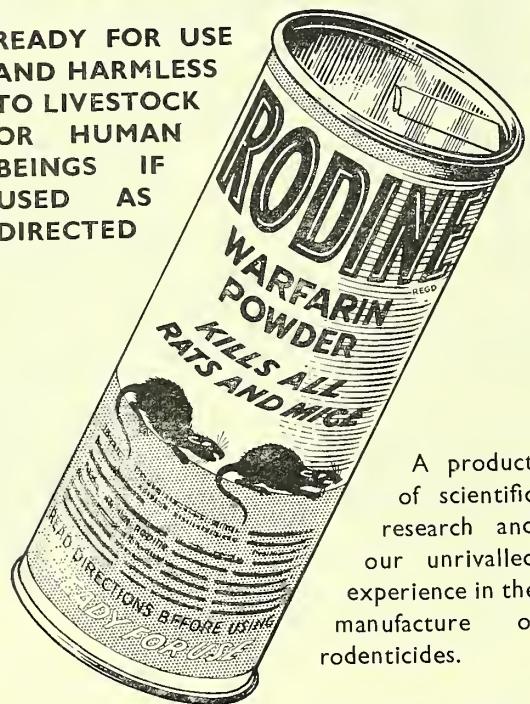
**This full page
advertisement in the
DAILY HERALD on Sept. 29th
opens the biggest-ever national**

**advertising campaign for KORAY, in the newspapers
with the greatest pulling power—DAILY MIRROR, DAILY
EXPRESS, DAILY MAIL, DAILY HERALD, NEWS CHRONICLE
—read daily by more than 35,000,000 people. In addition,
millions in the London area will see advertisements
in the STAR, on buses and in underground trains.**

SEND YOUR ORDER NOW TO: KORAY LTD., BRIDGEND, GLAM.

HARLEY'S announce a new type of **RODINE**

READY FOR USE
AND HARMLESS
TO LIVESTOCK
OR HUMAN
BEINGS IF
USED AS
DIRECTED



A product
of scientific
research and
our unrivalled
experience in the
manufacture of
rodenticides.

Rodine products are good selling lines, safe to stock, and regular and certain profit makers.

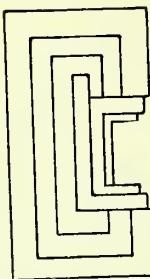
Stock also the RODINE PASTES



ATTENTION.—Do not accept anything "just as good as Rodine." RODINE stands for rat poisons of repute and is also a protected trade name.

Sole Manufacturers:

THOMAS HARLEY LIMITED
RODINE WORKS, PERTH, SCOTLAND



bismuth

*in the treatment of
GASTRITIS.
HYPERCHLORHYDRIA
PEPTIC ULCER*

ensures

neutralization of Acidity
rapid Symptomatic relief
protective coating on Ulcer
rapid healing of Mucosa

*Illustrated literature on
BISMUTH THERAPY
available from*

BISMUTH RESEARCH DEPARTMENT
MINING & CHEMICAL PRODUCTS LTD.
376 STRAND, LONDON, W.C.2



A GOOD PRODUCT

that is

REGULARLY ADVERTISED

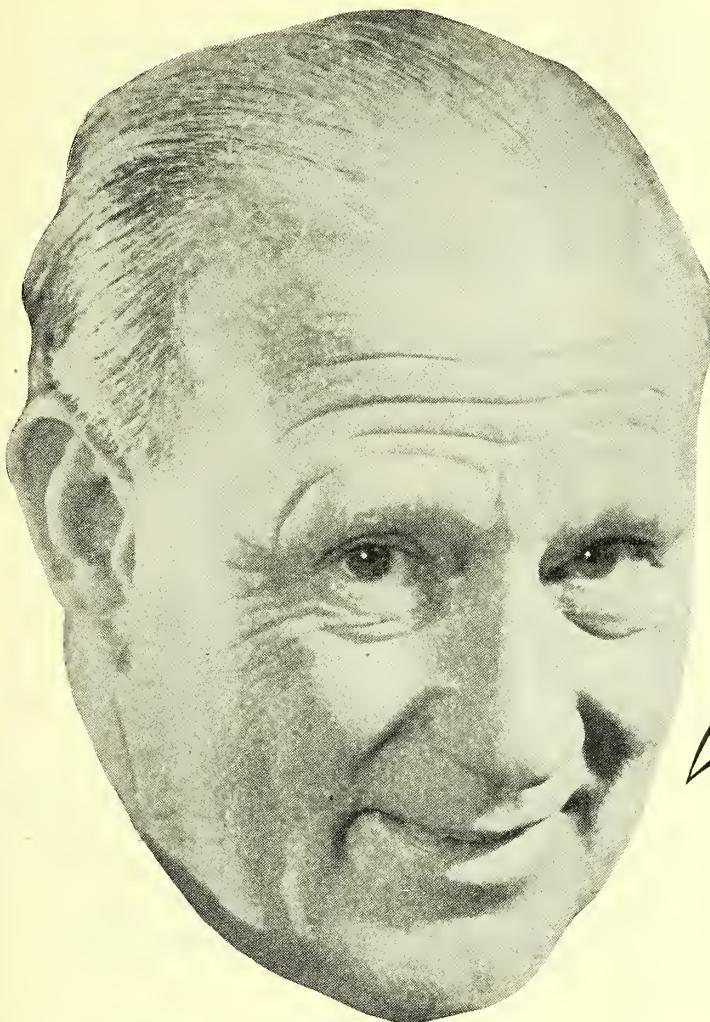
and brings you

REPEAT SALES.

Dirty Paws

Non-Gritty Hand Cleanser

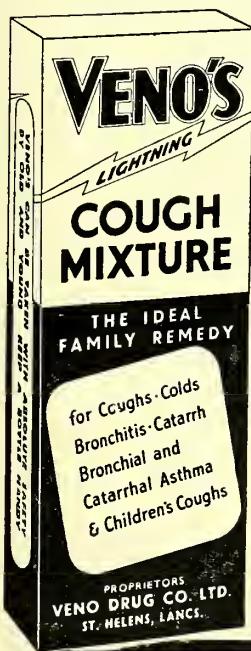
KAY BROTHERS LIMITED, STOCKPORT



*my
customers
say
VENO'S
is extra
soothing*

TAKE MY TIP AND STOCK UP NOW!

Veno's advertising in the National Press this coming Autumn and Winter will be seen and read by millions of families. Don't risk running short of stock of this famous line, noted for its extra soothing properties. You will be prepared to meet demand if you order adequate stocks now . . . a card in the post tonight will ensure early delivery. Veno's on your counter, in your window, will give you a powerful link-up with the intensive publicity. Veno's profits are too good to lose!



Please send all enquiries to

BEECHAM (NORTHERN) LIMITED, ST. HELENS, LANCS.
sole distributors for Veno Drug Co. Ltd.

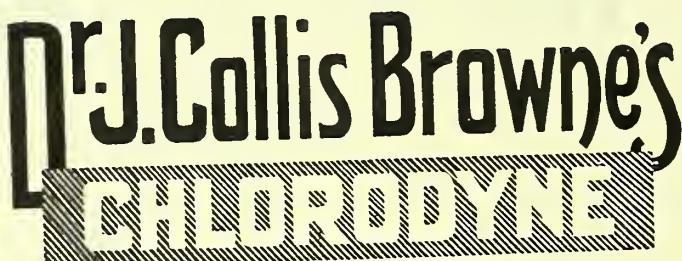
CORK LINED SLEEVES

CORRUGATED PULL-THROUGH BOXES

Compressed Paper Packing Limited
Horton Road - West Drayton - Middlesex

Telephone: WEST DRAYTON 2237

Dr. J. Collis Browne's Chlorodyne
and
The Pharmacy and Poisons Act, 1933



SALE RESTRICTED TO REGISTERED CHEMISTS

PURCHASER'S SIGNATURE NOT REQUIRED

P.A.T.A.

Sole Proprietors :

J. T. DAVENPORT LTD.
UNION STREET - LONDON, S.E.1



When your advice is sought

for a family laxative.

Compounded from the natural extracts of senna and figs with which suitable aromatic carminatives are combined, 'California Syrup of Figs' acts by stimulating the colon and secures elimination with-

out irritation, discomfort or subsequent fatigue.

'California Syrup of Figs' perfectly meets the need for a mildly acting yet efficacious laxative suitable for all members of the family.

'California Syrup of Figs'

The other Phillips' Proven Products are:—

'Milk of Magnesia'

REGD.
Of unsurpassed efficacy in the treatment of a wide variety of conditions associated with gastric acid disturbances.

'Mil-Par'

REGD.
A genuinely mild evacuant ideally suited for administration to young infants, the enfeebled, sick or elderly.

'Milk of Magnesia' Tablets

REGD.
Particularly valuable to the chronic or casual sufferer from dyspepsia and acid indigestion. Pleasantly mint flavoured.

Phillips' Dental Magnesia Toothpaste

A dentifrice of proved efficacy in keeping the teeth scrupulously clean. Contains 'Milk of Magnesia' to neutralize harmful mouth acids.

September 19, 1953



Enhance the dignity of your Pharmacy with **RECESS LABELLED BOTTLES**

A dignified array of Beatson Clark recess labelled bottles can enhance the professional tone of your pharmacy. The brightness and well-balanced proportions of these bottles, together with the restrained touches of red and gold on the recessed panels, are in keeping with the quality of the galenicals they contain and the care with which they are dispensed.

May we send you details and prices of our range
of Recess Labelled Bottles



"The Sign of a

Good Bottle"



**BEATSON CLARK & CO. LTD.
ROOTHERHAM · YORKSHIRE**

Glass Bottle
Manufacturers
ESTABLISHED 1751

B.C.81

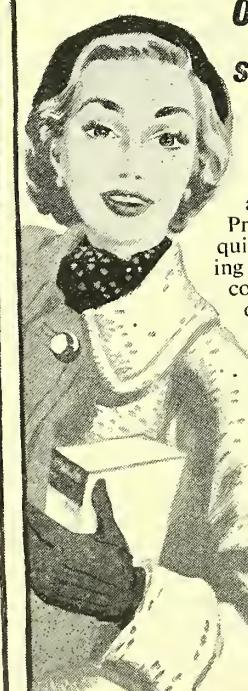
Of course you stock Prestoband?

They'll all be asking! There's a minor injury in the family... or else their supply has just run out. More and more folk are saying they *must* have Prestoband handy. They like this quickest, cleanest, healthiest dressing for wounds; this safest, most comfortable strapping. It's easy on, painless off, and no mess left behind!

Keep apace with demand (and our national advertising) and stock antiseptic, water-resistant, pinless, knotless, neat and tidy Prestoband.

Generous trade terms. Packed in attractive display outers. 3 widths; 2", 1" or $\frac{1}{2}$ " at 1/6, 9d. or 7d. a 4-yard roll.

Made by Vernons of Preston, Sole Distributors in the U.K. are Fassett & Johnson Ltd., 86 Clerkenwell Rd., London, E.C.1, and 6 Crow St., Dublin



PRESTOBAND

THE ANTISEPTIC SELF-ADHESIVE BANDAGE

*sticks to itself, but NOT to the skin!

RENTOKIL TIMBER FLUID KILLS WOODWORM

Record sales have proved the public's appreciation of RENTOKIL TIMBER FLUID. ALWAYS hold adequate stocks of this outstanding woodworm preventive. Retails at 2/-, 3/3, 5/9, 9/6 and in bulk.



Increased Value!

Complete outfit, comprising 16 oz. tin and Injector as illus. 10/6d.

RENTOKIL LTD., Fetcham, Leatherhead, Surrey.

Tel: Leatherhead 4021/2

Your customers will see this

For over 50 years Gillette scientists have studied shaving. Gillette Shaving Creams are the result of the world's widest experience and most intense research. They will give you a standard of comfort you have never before experienced.

And that's not all—Gillette Shaving Creams contain K-34, an amazingly effective antiseptic. K-34 kills 99% of the bacteria ordinarily found on the face and, in addition to its protective qualities, the regular use of Gillette Shaving Cream makes the skin more healthy.

Brushless or Lather, these new creams are very economical because so little is enough for a superbly easy shave.

For a clearer, healthier complexion and a revelation of how cool and easy a shave can be, take home a tube of Gillette Shaving Cream today.

Lather Standard Size 2/3
Giant Size 3/6

Brushless Standard Size 2/3
Giant Size 3/6

Gillette shaving creams protect your skin

..in the DAILY EXPRESS Oct 15

Read by over 5,250,000 men

This half page advertisement in the DAILY EXPRESS is a real stopper—and a seller. It will reach over 4,000,000 homes and be read by over 5,000,000 men—all of them shavers. And all of them customers for you. Let them see on your counter, in your window, that they can get their Gillette Shaving Creams from you.

GILLETTE SHAVING CREAMS

STOCK . . . DISPLAY . . . SELL

An Advance in Contraception



ANTEMIN—an entirely new contraceptive cream recently introduced—constitutes a notable advance in modern methods of family planning. Formulated in the light of extensive research, it affords all the qualities desirable in a contraceptive preparation.

- Spermicidal activity S/4.
- pH value approximating to normal vaginal secretion.
- Cosmetic-type cream base...Non-friable and tenacious.
- Non-irritant to vaginal mucosa. Non-toxic.
- Inexpensive. Simple in application.
- Approved by the Family Planning Association for use in conjunction with a mechanical barrier.

Antemin

Retail Price . . . 3/- per tube

Trade Discount 33 $\frac{1}{3}$ %

Medical literature available to Pharmacists on request.

Manufactured by

COATES & COOPER LTD.

PYRAMID WORKS · WEST DRAYTON · MIDDX.



NIPAGEN-M

Regd. Trade Mark

B.P.C. STANDARD

The original British made preservative with its wide use for pharmaceutical and cosmetic preparations.

Our Service Dept. will gladly co-operate with you on all technical problems.

NIPA LABORATORIES LTD
TREFOREST TRADING ESTATE
Nr. CARDIFF TEL: TAFFS WELL 128 & 150

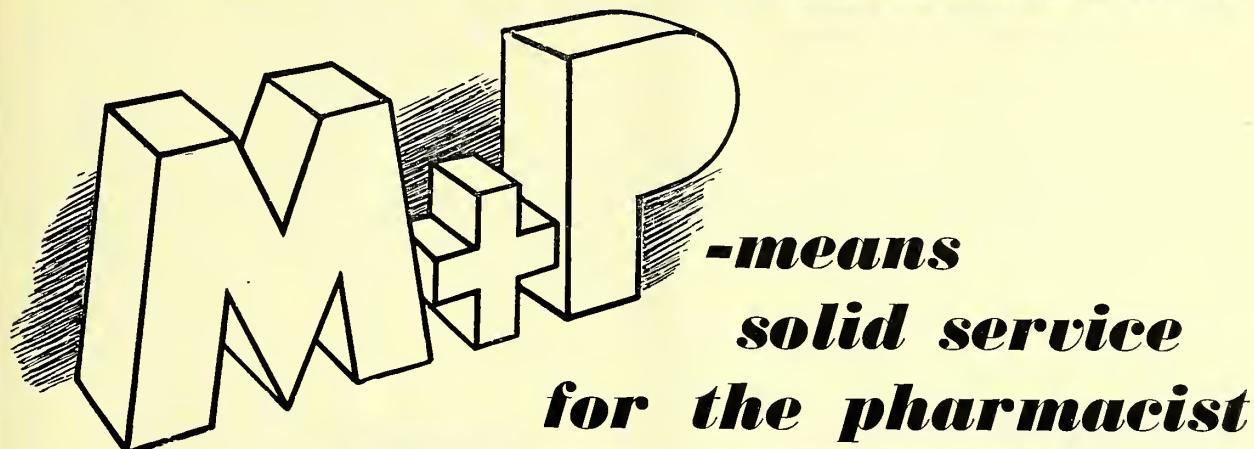
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P. SAMUELSON & CO.

ROMAN WALL HOUSE,

I CRUTCHED FRIARS, LONDON, E.C.3

Telephone : ROYAL 2117/8



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at M + P*

- [1] Counter Proprietaries Department.
- [2] Drugs Section.
- [3] Manufacturing Division.



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PHARMACEUTICALS LTD.**
LOW FRIAR LANE, NEWCASTLE-ON-TYNE I

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SPECIALISTS IN B.P. POWDER
SAMPLES AND PRICES ON REQUEST
FREUDENTHEIL, SMITH & CO
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DICTIONARY OF SYNONYMS
For the pharmacist and his staff.
Contains over 7,000 synonymous terms.
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The Chemist and Druggist
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QUEEN

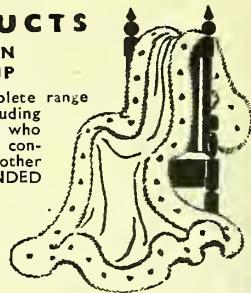
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EVERY DAY MAKE-UP

Queen beauty products form a complete range of toilet and beauty preparations, including lipsticks, specially for those women who have sensitive skins. Queen products contain no orris in any form, nor any other skin irritants AND ARE RECOMMENDED BY THE MEDICAL PROFESSION.

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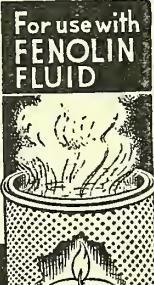
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"Escape seemed impossible... chemical machines spluttered and failed... acid squirted by one just missed my eyes... but reliable, non-damaging Nu-Swift saved us all."

NU-SWIFT LTD • ELLAND • YORKS
In Every Ship of the Royal Navy

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FOR THE ROLL
AND 9d. FOR
THE FLAT
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Why is Calsol Milk a best seller? because it doesn't solidify, doesn't separate—keeps its satin-smooth creaminess on the beach, in the home—and on your shelves!

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READY SHORTLY**A REVISED AND IMPROVED EDITION**

OF

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By L. M. Spalton, B.Pharm., M.P.S.

Now Bound in cloth and fully indexed

TODAY, the pharmacist is faced with an almost bewildering assortment of emulsifying agents, all having varying properties and requiring different methods of treatment.

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The practical uses of emulsifiers is dealt with at considerable length, together with methods of handling each type of emulsifying agent and full notes of incompatibilities and other matters.

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Useful and up-to-date—this book provides essential information in concise form.

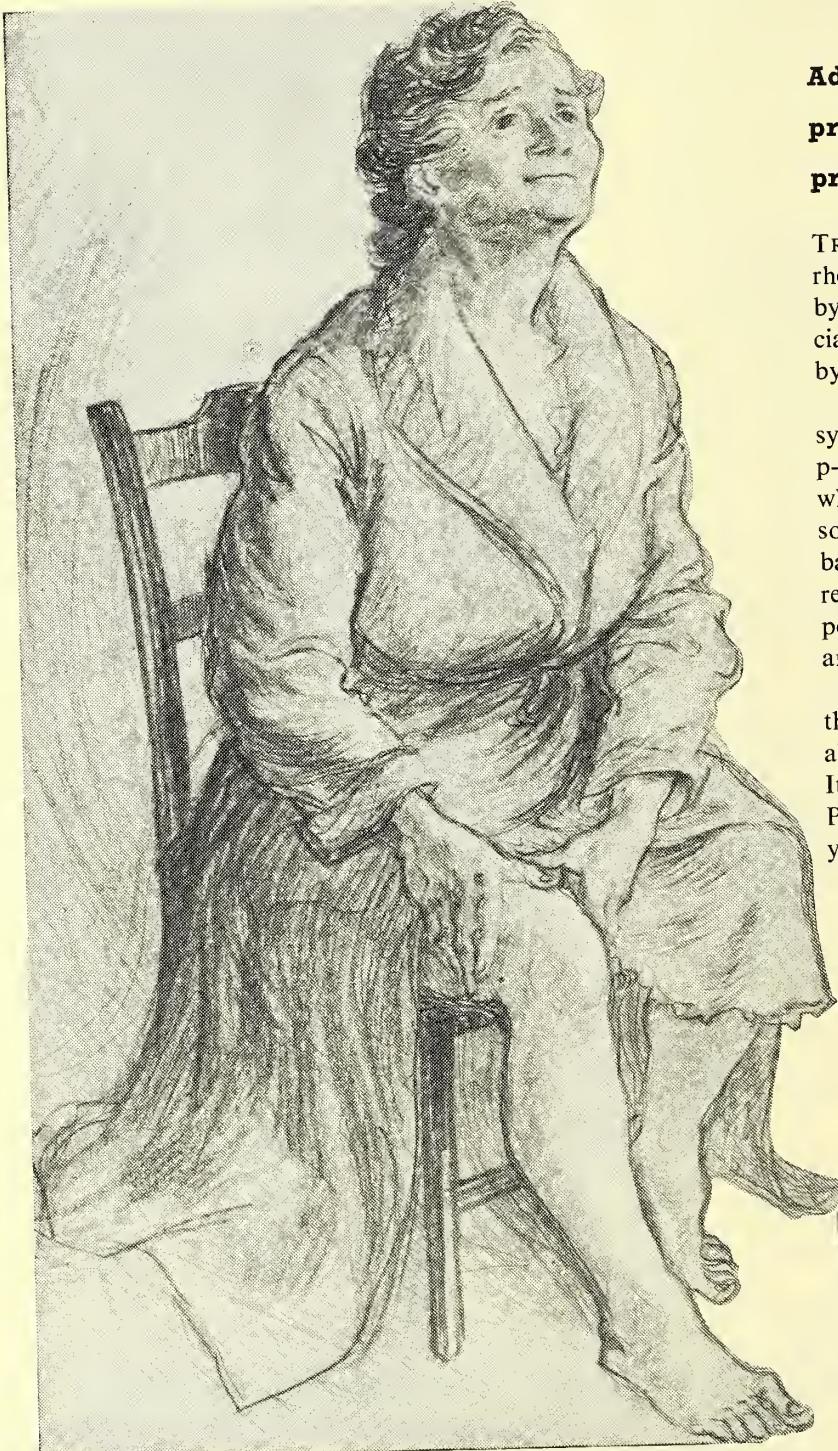
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The
CHEMIST AND DRUGGIST

28 ESSEX STREET, STRAND, LONDON, W.C.2

A new and logical therapy for Rheumatic conditions



Advertised to the medical profession—in demand for prescription

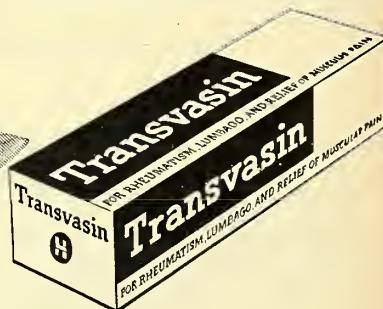
TRANSVASIN, a new treatment for rheumatism that has been developed by Hamol S. A., our Swiss associates, is now being manufactured by us in this country.

Its main constituents are newly-synthesized derivatives of salicylic, p-aminobenzoic, and nicotinic acid, which, being both water- and fat-soluble, readily pass through the skin barrier in therapeutic quantities and reach the seat of the trouble. It possesses properties that are unique among preparations of its kind.

Transvasin is being publicized to the medical profession, which is already beginning to prescribe it. It is available in tubes at 4/- retail. Please order your stocks through your wholesaler, or direct from us.

FORMULA

Salicylic acid tetrahydrofuryl-ester 14%
Nicotinic acid ethyl-ester 2%
Nicotinic acid n-hexyl-ester 2%
p-Aminobenzoic acid ethyl-ester 2%
Water-miscible cream base ad 100%



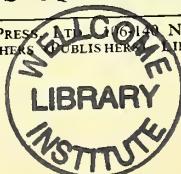
TRADE TERMS

30/- per dozen plus P.T. 7/6 per dozen.
Prescribable on form E.C.10

LLOYD-HAMOL LTD., 3 ST. JAMES'S SQUARE, LONDON, S.W.1. WHITEHALL 8654/5/6

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53/23



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CAFFEINE & SALTS	PODOPHYLLIN RESIN
CHLORAL HYDRATE	SALICYLATES
CHRYSAROBIN	SANTONIN
CITRATES	STRYCHNINE & SALTS
EPHEDRINE & SALTS	THEOBROMINE & SALTS
ESERINE & SALTS	THEOPHYLLINE & SALTS
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CARNEGIE CHEMICALS (WELWYN) LTD

WELWYN GARDEN CITY : HERTFORDSHIRE : ENGLAND

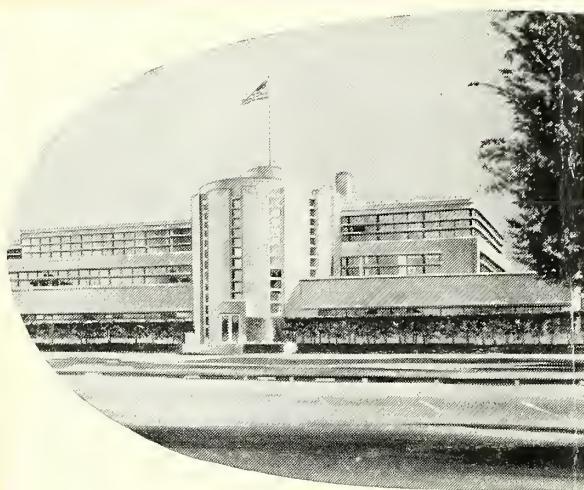
Telegrams: CARNECHEM, WELWYN GARDEN

Telephone: WELWYN GARDEN 506 (4 lines)

A 'Carnegies of Welwyn' Company

The
CHEMIST AND DRUGGIST

SEPTEMBER 19 1953



PRO-BANTHINE* is now being introduced to the medical profession in Great Britain by individual calls of experienced SEARLE representatives and through an extensive direct mailing campaign—both backed by the distribution of professional samples. 'PRO-BANTHINE' is identical in action to its widely reported forerunner 'Banthine' but is 2 to 5 times more potent and exhibits greatly reduced side-effects. 'PRO-BANTHINE' acts as an anticholinergic drug through its ability to inhibit the transmission of neural stimuli at the sites where acetylcholine serves to transmit the impulse. These sites are the parasympathetic ganglia and effectors and the sympathetic ganglia.

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research laboratories

*to Pharmacists and Doctors
in Great Britain comes*

SEARLE

Pro-Banthine*

BROMIDE

brand of
Propantheline
Bromide

*the remarkable new oral anticholinergic
agent for Peptic Ulcer*

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Ethical Pharmaceuticals
since 1888

G.D. SEARLE & CO. LTD
17, Manchester Street
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'PRO-BANTHINE' is perfectly safe. In the great majority of peptic ulcer patients 'PRO-BANTHINE' produces a complete or significant relief from pain and a definite acceleration of healing of the ulcer crater—usually within 48 to 72 hours after treatment with 'PRO-BANTHINE' is started. Presented as sugar-coated tablets, 'PRO-BANTHINE' is easily administered and is devoid of unpleasant taste. Supplied in bottles of 40, 100 and 1,000 tablets each containing 15 mg. of Propantheline Bromide. Obtainable from your wholesaler.